U.S. Patent Application No. 10/681,352 Amendment After Allowance dated August 20, 2009 Reply to Notice to File Corrected Application Papers of August 11, 2009

### **AMENDMENTS TO THE DRAWINGS:**

The attached sheets of drawings include changes to Fig. 67-129. These sheets replace the original sheets including Figs. 67-129.

As requested in the Notice to File Corrected Application Papers, the drawings 67-129 have been corrected to replace the word "Diagram" with the word -- Fig. -- in its place.

Attachment: Replacement Sheets (63 sheets)

Annotated Sheets Showing Changes (63 sheets)

### **REMARKS/ARGUMENTS**

Reconsideration and continued examination of the above-identified application are respectfully requested.

The amendment to drawings 67-129 has been made in response to the Notice to File Corrected Application Papers dated August 11, 2009. In the Notice, the U.S. Patent and Trademark Office stated that drawings 69-129 were labeled "Diagram." Upon review, the applicant's representative noted that drawings 67-129 were labeled "Diagram." Accordingly, drawings 67-129 have been corrected to replace the word "Diagram" with the word -- Fig. -- to be consistent with previously-filed Figs. 1-66. The applicant believes that this fully responds to the drawing requirements set forth in the Notice to File Corrected Application Papers. This amendment is limited to a correction of an informality and is not substantive in nature.

Accordingly, no questions of new matter should arise and entry of the amendment is respectfully requested.

### **CONCLUSION**

If there are any fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-0925. If a fee is required for an extension of time under 37 C.F.R. §1.136 not accounted for above, such extension is requested and should also be charged to said Deposit Account.

Respectfully submitted,

La La

Luke A. Kilyk

Reg. No. 33,251

U.S. Patent Application No. 10/681,352 Amendment After Allowance dated August 20, 2009 Reply to Notice to File Corrected Application Papers of August 11, 2009

Atty. Docket No. 3190-044 KILYK & BOWERSOX, P.L.L.C. 400 Holiday Court, Suite 102 Warrenton, VA 20186

Tel.: (540) 428-1701 Fax: (540) 428-1720

Attachments: Replacement Sheets (63 sheets)

Annotated Sheets Showing Changes (63 sheets)

Diagram 67

69	62	60		55	46	45	4	35	29	28	27	24		12				
aqp37	aqp30	aqp28	aqp26	aqp23	aqp14	aqp13	aqp9	aqp3	aqp_4	aqp_5	aqp_6	aqp 9	aqp_10	aqp_21	aqp_27	ន្ត		- C
DIY	HSY	ST	GLY	5	<u> </u>	ĄG	FLY	PS	۲	PS	ST	Z	AS	G	AS	Diversity		
		28S=28T= 30S=37I=4 6V=46E=4 7F=47Y=5 2P=52L=5		Ħ	L=M			3P=3S=9L =37D									Equivalence	
							(9<0)									Total	Total (+) vs (-)	Prognosis
							Yhetero>(-)									Total	Total (homo)	Prognosis
DY68	SY75	ST68.2		LR67.4	LM70.1	AA67		PS68	VV66.9	LL80, SS80	П66.7	1180		GG66.7			Total	Prognosis
										(+)e(+)						Stomach	Total (+) Vs (-)	Prognosis
				, v						L(-)>hetero						Stomach	Total (homo)	Prognosis
IY83.3	HS100	ST77.8		RR68.1	LM72.4	AG68.4	LY720	PS69.4	LV67.7	LL100	ST67.7	IM75.2		DG67.7			Stomach	Prognosis
				R(+)>(-)			(+)×(-)									Other cancers	Total (+) vs (-)	Prognosis
				Lhetera.(- )>horno, Rhetera.ho mo>(-)			Yhetero>(-)									Other cancers	Total (homo)	Prognosis
DY65.3	SY100	П63.4		LR67.20	LL70	AA65.3	LY79.80	PS65.3	LL87.5	LS100, SS100	SS87.5	11100		DD87.5			Other	Prognosis
	Immunotherapy H(+)>(-)						no adjuvant therapy Y(+)>(-), (mmunotherapy Y(+)>(-)		no adjuvant therapy L(-)>(+)		no adjuvant therapy S(-)>(+)			no adjuvant therapy D(-)>(+)		Total	Total (+) Vs (-)	Treatment Effect

Diagram 68

118	117	116	109	107	106	103	102	99	ç	89	88	87	85	22	79	78	77	70			
20086	agp85	aqp84	aqp77	aqp75	aqp74	aqp71	aqp70	aqp67	agpoo	aqp57	aqp56	aqp55	aqp53	aqp52	aqp47	aqp46	aqp45	aqp38	B		-
ΔEG	- ۲۷	EQ	곡	LV	AES	ADKT	EGR	<	 Fr	ADSV	₽	LPR	ြည	LPS	FY	ΕV	EG	ΑV	Diversity		
								<u>=</u>	671=66V		L <del>-</del> P	55P=55R	L <b>=</b> Q	52P=52L	F=Y	E=V	E=G	A=V		Equivalence	
								V(+)>(-)	E(+)>(-)										Total	Total (+) Vs (-)	Prognosis
								ihetaro>(- )>homa. Vhetero>h amo>(-)	Phone Eh Phone Eh etero-hom o>(-)	Ahomo>(- )>hetero									Total	Total (homo)	FIOGILOSIS
AG67.8	VV66.5	EE66.5	RT69.7	LV69.6	ASBOO	AK1000	01 9996	N7840	oca.	AA84.70	LP67.20	LP 1080	QQ66.5	LP68.2	FY68.2	EV68.2	EG67	VV69. <b>4</b>		Total	FIOGRAPIS
								V(e)×(g)	P. P										Stomach	Total (+) vs (-)	Flogilosis
								Ihetero>(- >-home, Vinetero>h omo>(-)	Phone, Ehelerdah amas()										Stomach	Total (homo)	Flogilosis
FG76 1	LV68.5	EQ68.5	RT72.4	LV71.5	AE83.3	КТ83.3	GR69.6	1 <b>7720</b>	000	AS100	LP68.4	LR750	LQ68.5	LP77.8	FY77.8	EV77.8	EG68.6	W71.7		Stomach	Cichina
				<del> </del> -				(*) (*) (*)			P(+)>(-)								Other cancers	Total (+) vs (-)	riogilosis
						Dhelero,(- )>homo, Ehetero>ho mo>(-)	Ehetero,(-	hetero<(- )>homo, Vhetero jio mo>(-)	Ehelero-ho		Lhelaro,(* )>home, Phetero,ho mo>(-)								Other	Total (homo)	riogiliosis
AG80.90	VV64.9	EE64.9	RR82.7	LV66.4	AS100	AA700	6672.70	<b>V670</b>	Copy W	SV80	<b>5</b>	PR68.3	QQ64.9	PP63.4	YY63.4	VV63.4	EG64.2	AV64.7		Cancers	Floundais
				<del> </del>				no adjuvant therepy V(+)>{/}, Chemotherapy V(+)>{/}, Immunotherapy V(+)>{/}	E(+)>(-). Chemotherapy E(+)>(-). Immunotherapy E(+)>(-).										Total	vs (-)	Trial(:)

Hig. <del>Diagram</del> 69

						) !			K(3)		survived		
						DO74AS/3			DQ71AKD		₽		
	RR70			QR72.4			QR70.1				R	aqp224	256
	QQ64.9			HQ68.5			QQ66.5				ğ	aqp221	253
	RR64.9			HR68.5			RR66.5				于	aqp220	252
	VV66.9	-		IV70.7			IV67.5				<	aqp203	235
	NS65.3			NS69.4			NS68				NS	aqp197	229
	1165			1169.4			1167.8				П	aqp185	217
	SS64.1			NS68.4			SS66.4				NS	aqp182	
	HH65.3			HR68.4			HH67				품	aqp167	199
	AA64.1			AT68.4			AA66.4				AT	agp140	172
Immunotherapy R(+)>(-)	QR67.2			RR68.2			QR66.9				S	aqp130	162
	HQ71.5			QQ67.9			HQ71.4				ğ	aqp126	158
	GS72.5			GS75.3			GS74.4				AGS	157 aqp125	157
				-							<	aqp116	148
	1164.9			IT68.5			II66.5				ī	aqp90	122
	GG64.9			GT68.5			GG66.5				GT	aqp89	121
Immunotherapy Y(+)>(-)	FY75.90	Fhetero, (-)>homo		LY72.1			FY72.1				FLY	aqp87	199
Total		Other cancers	Other cancers		Stomach	Stomach		Total	Total		Diversity	DΩ	
Total (+) vs (-)	Other	Total (homo)	Vs (-)	Stomach	Total (homo)	(-)	otal	lotal (homo)	rotal (+) vs (-)	Equivalence			
Prognosis	riognosis	riogilosis	Prognosis	LIGHTONS	Flogliosis	Ficultion	PIEDLIA	Togricos	riognosis	1			

Diagram 70

aqp37	aqp30	aqp28	aqp26	aqp23	agp14	aqui	ann13	aqp9	aqp3	aqp_4	aqp_5	aqp_6	aqp_9	agp_10	aqp_21	aqp_27	8		
DIY	HSY	ST	GLY	5	2	3	AG	FLY	PS	۲۷	LPS	ST	Ξ	AS	DG	AS	Diversity		
	Thoma, immunotherapy Yhatero>(-) homo							no adjuvant therapy Yhetero-homo>{-], immunotherapy Yhetero-homo>{-)		no sijuvant therapy U- )>hetero (nomo), no adjuvant therapy Vhomo>hetero ((-))	no adjuvant therapy Phomo>hetero.((-))	no adjuvant therapy S(- )>hetero (homo), no adjuvant therapy Thomo>hetero ((+))			no adjuvant therapy O(- )>he(ero (homo), no adjuvant therapy Ghomo>hetero.((-))		Total	Total (homo)	Treatment Effect
no adjuvant therapy YY(78.2), Chemotherapy DY(62.5)	HY(60.6)							Chemotherapy LY(64.5), Immundtherapy YY (63.9)	no adjuvant therapy SS(78)	no adjuvant therapy VV87.8	hemunotherapy PP82	no adjuvant therapy TT87.8			no adjuvant therapy GG87.8			All cases	naatment Ellect
								immunosherapy Y(*)×/-)		no adjuvam (herapy L(+)>(+)	no adjuvant therapy L(-)>(+).	NIS S(-)×(+)			no adjuvant therapy D(-)>(+)		Stomach	Total (+) Vs (-)	i reatment Effect
	Immunotherapy Histero-(- ) homo, immunotherapy Yherero-(-) homo									no adjuvant therapy N(- )-hetero (norio), no adjuvant therapy Vhorno-hetero ((-))	no adjuvant therapy Lifetero>(-), no adjuvant therapy Phomo>Hefero.((-))	)>hetero (florig), no adjuvant therapy Thompovietera ((-))			no adjuvant therapy D(- )>hetero (homo), no adjuvant therapy Gforno>hetero ((-1)		Stomach	Total (homo)	Learnent Ellect
	Immunotherapy HY(65.2)							іншенойнегару Ү(62.9)		no adjuvant therapy VV92.6	no adjuvant therapy PP92.6	no adjuvant therapy TT92.6			no adjuvant therapy GG92.6			Stomach cancer	THE PERSON AND PROPERTY.
maraby Y(+)-(-)								no adjuvant therapy Y(+)>(-), Chemotherapy Y(+)>(-)	N(\$(*)>(-)		no adjuvant therapy L(-)>(+)						Other cancers	Total (+) Vs (-)	Trought City Prices
no adjuvant therapy D( ), heterovhomo, no adjuvant therapy Dhomo, heterov(-)								Immunotherapy Fination (-)-shorno, no adjuvant therapy Yhetero hamo>(-). Chemotherapy Yhetero homo>(-)	no adjuvant therapy P(- ),heteroxhomo, no adjuvant therapy Shomo,heterox(-)				-				Other cancers	Total (homo)	Troop Lines
no adjuvani therap XY (69.7):								no adjuvant therapy LY (75.1). Chemotherapy LY (65.8), immuniofferapy LY (68.1)										Other cancers	

Fig. Diagram 71

aqp86	aqp85	aqp84	aypii	20077	aqp75	aqp74		aqp/1	aqp/u	aqpo/	3		aqp66	aqp57	aqp56	aqp55	aqp53	aqp52	aqp47	aqp46	aqp45	aqp38	8		
AEG	۲۷	FQ	1 2	PT	ر ا	AES		Ž.	EGR	₹	<b>.</b>		 Di	ADSV	F	LPR	ည	LPS	FY	ΕV	EG	Ą	Diversity		
Immuriottelaby Gie										Chemotherapy theteroy(-) homo, immunotherapy thetera (-)>homo, immunotherapy thetera (-)>homo, roadiurant therapy Vhetero, (-))>homo, Chemotherapy Vhetero+),homo, mmunotherapy Vhetero,homo>(-)	Ehetero homo>(-)	)-homo, no adjuvant therapy Ehetero ((-))-homo, Chemotherapy Ehetero (-), homo, Immunotherapy	no adjavani therapy Dhetero ((- ))>homo, Chemotherapy Dhetero (- ),tomo, Immunotherapy Dhetero (-	Immunotherapy Ahomo (all survived)>(-), hetero									Total	Total (homo)	1 deantenit Ellect
Glieferd / / / Joint										aby newo ((*)). heteroy-, homo, linetera (-)>homo, 'Projeto ((-))>homo, /hetero (-),homo, /hetero (homo>(-)	i i	therapy Chemotherapy Imunotherapy	Ohetero.((- apy Dhetero>(- apy Dhetero.(-	no (all survived)>(-											
Immunotherapy EG(78.2)										therapy IV(79.6). Chemotherapy OE(62.1). Invirualitierapy EE(60.3)		DE(62.1), Immunolherapy EE(60.3)	no adjuvent therapy EE(77.7), Chemotherapy	(100)										All cases	
herapy																							Stomach	Total (+) Vs (-)	Effect
										Unclinion empty United Type Un		Energia (-), jono	Chemotherapy Dheterox(+) homo Chemotherapy	Wiefere L-)>home								Chemotherapy Ahetero>(-), homo, Chemotherapy Vhetero>(-), homo	Stomach	Total (homo)	
Chemotherapy AA 70.6, immunotherapy										Communication (Control			Спетопетару Ос(60.1)									Chemomorapy Av(sp.z)		Stomach cancer	
				-																		(+)>(-)	Other cancers	Total (+) Vs (-)	
no adjuvant therapy Ahetero.((-))>homo										Thetero.(ft)>fomo, Chemotherspy Vhetero.(ftomo)>(-)		Ehelero (homo)>(-)	Chemomerapy Dhetero>(;-)),hemo, Chemotherapy									1 (1 (a)	Other cancers	+	
no adjuvant therapy AG(87.5)							Chemotherapy TT(59.9)	AD(4):7)	Circle Area mail and		Change and W/S		Chemotre apy project									AV(71:3)		Other cancers	

Fig. Diagram 72

 4		aqp221 HQ	aqp220 HR	aqp203 IV	aqp197 NS	ļ	aqp182 NS	 aqp140 AT	aqp130 QR	 aqp125 AGS	aqp116 IV	aqp90 IT	aqp89 GT	aqp87 FLY	DQ Dive			
									Immunotherapy Ohetero-(-)-homo, Immunotherapy Photero-homo-(-)	S				Immunotherapy Yhetero>homo.(-)		Total (homo)	Treatment Effect	
					no adjuvant therapy SS(78)				Inmunotherapy OR(75)					no adjuvant therapy FY(82.3), immunotherapy LY (71.2)		All cases	Treatment Effect	
														Immunother apy F(-)>(+)	Stomach	Total (+) Vs (-)	Treatment Effect	
														immunotherapy A(- )>(homo), Chemotherapy Fhoma>hetero.(-)	Stomach	Total (homo)	Treatment Effect	
					NIS SS(74)									Chemotherapy FF(81.3), immunotherapy LY(68.1)		Stomach cancer	Treatment Effect	
					tio adjuvant therapy S(+)>(-).										Other cancers	Total (+) Vs (-)	Treatment Effect	
					no adjuvant therapy N(, ) hetero>homo, no adjuvant therapy Shomo,hetero>(-)									no adjovant therapy Fhetero.(⊾ )>tromo	Other cancers	Total (homo)	Treatment Effect	
					no adjuvant therapy Ss(68.8)					no adjuvant therapy AS(73.7)				no adjuvant therapy FY(75), YY(75)		Other cancers	Treatment Effect	

Fig. Diagram 73

# LL100, LM23.2O	#			
3.20			ーエグく	aqp30
3.2O			ST	aqp28
3.20			GLY	aqp26
3.20 3.20			FR	aqp23
30,	LM2			:
	<u></u>		5	aqp14
			AG	aqp13
			FLY	aqp9
	#		PS	aqp_3
			LV	aqp_4
			LPS	aqp_5
			ST	aqp_6
			Z	aqp 9
			AS	aqp_10
			DG	aqp_21
			AS	aqp_27
			Diversity	DΩ
		Family		
Metastases Alcohol Smoking	Category Met	Cancer in		
DQ DQ	DQ DQ	Da Da		

Diagram 74

aqp86 AE	AEG	[ V C C C C C C C C C C C C C C C C C C	GG94.4.		
agn85 LV	<	LV26.4 W12.5		- 1	
aqp84 EQ	Q	EQ26:4, EE12:5 0			
aqp77 RT	T				RR100, RT22.5
	LV				
aqp74 AE	ES				
	ADKT			l	#
	GR			ĺ	
aqp67 IV	/			Ì	
	DE			Ì	
aqp57 AD	DSV				
aqp56 LP	ס			l	
aqp55 LPR	PR	PR29.7, LR0.0			
aqp53 LQ	Q	LQ28:4, QQ12:50			
aqp52 LPS	PS				
	~				
aqp46 EV	<b>Y</b>				
aqp45 EG	G	EE50, GG19.4			
aqp38 AV	<			l	
	Diversity			İ	
		Cancer in Family	Category		Metastases
		כע	5	1	Ç

Fig. <del>Diagram</del> 75

					All survived	
		QR23.2 O				:
		RR100,			QR R	aqp224
				HQ26.4, QQ12.5 O	돐	aqp221
				HR26.4, RR12.5 O	于	aqp220
		VV32, II22.2		#	IV	aqp203
DI66 7.		#			NS	aqp197
						aqp158
				NS26.8, SS12.2 O	NS	aqp182
					<b></b>	aqp167
				AT26.8, AA12.2 O	AT	aqp140
			#		R	aqp130
					Ħ	aqp126
		0				
		SS100, AA20			AGS	aqp125
		II100, IV23.2			<	aqp166
				IT26.4, II12.5	コ	aqp90
				GT26.4, GG12.5	GT	aqp89
		'YY50, LL20 O			FLY	aqp87
					Diversity	Da Da
Smoking	Alcohol	Metastases	Category	Cancer in Family		
DQ	D	DQ	DQ	DQ		

Diagram 76

93	90	78		72	69	58		57	53	34	28	26	19	14	12	4	-16	Nucleic Acid		묾
2	2	3		5	<sub>ω</sub>	<u></u>		7	2		4	5	2	3	ن. ن	3	3	No. of Diversity		
																		Total		Total
			rcecrcee	rCGGrCGG>							hCACeGAG						aGCGaGCG>	Stomach		
						eGAGaGCC> eGAGaGCU	dGAUdGAU	dGACdGAU>										Other cancers		
		Chemotherapy: yUACyUAC> yUAUyUAU		no adjuvant therapy: rCGCrCGG>rCGGrCGU		no adjuvant therapy: aGCCaGCC>aCGUaGCU, Chemotherapy: aGCUaGCU, aGCGaGCG, aGCCaGCU>aGCGaGCU									Immunotherapy: kAAAkAAA>kAAGkAAG> kAAAkAAG			Treatment Effect	All cases	
			Chemotherapy: rCGGrCGU, rCGGrCGG, rCGCrCGG>rCGCrCGC	no adjuvant therapy: rCGCrCGG>rCGGrCGU	no adjuvant therapy:										Immunotherapy: kAAAkAAA>kAAGkAAG> kAAAkAAG			Treatment Effect	Stomach Cancer	
		Chemotherapy:					Chemotherapy: aGCCaGCU>aGCCaGCU, aGCGaGCU>aGCGaGCG	no adjuvant therapy: dGACdGAU, dGAUdGAU>dGACdGAC,		no adjuvant therapy: qCAAqCAA> qCAAqCAG					no adjuvant therapy: kAAAkAAG>kAAGKAAG			Treatment Effect	Other cancers	

Fig. <del>Diagram</del> 77

Stomach	Stomach Other cancers	Other cancers
	Other cancers	All cases Treatment Effect

Fig. Diagram 78

묶					
Nucleic	No. of	Cancer in Family	Alcohol	Metastases	Smoking
Acid	Diversity	•			
-16	ယ				
4	ယ				
12	51				
14	ω				
19	2				
26	5				
28	4		eGAGeGAG(55.6),		
			eGAAeGAG(0),		
			eGAAeGAA(16.7)		
<b>34</b>	သ				
53	2				
57	7				
58	6				
69	3				
72	<sub>ට</sub>	rCGGrCGU(50),			
		rCGCrCGG(40),			
		rCGCrCGC(0)			
78	3				
90	2				
ည ဂ	S				

Diagram 79

DR.					
Nucleic	No. of	Cancer in Family	Alcohol	Metastases	Smoking
Acid	Diversity				
95	2			vGUCvGUC(33.2),	
				vGUCvGUU(23.5),	
				vGUUvGUU(42.9)	
101	2				
104	3				
106	2				
112	2				
117	2				
145	2				# # # # # # # # # # # # # # # # # # #
152	2				
166	3				
169	2				
179	2				
181	3				
206	2				
217	2				

-Diagram 80

DQNP94	DQNP93	DQNP91	DQNP78		DONID77	DONP72	DQNP62	DQNP57	DQNP49	DQNP48	DQNP47	DQNP38	DQNP35	DQNP27	DQNP25	DQNP21	DQNP19	-15	-23	 elc	<u> </u>	R
2	2	2	2	4	<u> </u>	2	2	တ	ယ	2	ω	ယ	2	2	2	ω	2	2	N	No. or Diversity		
														~						otal		ota
1																				Stomach	2	
			VGUAVGUG, VGUGVGUG>	tACGtACG>tACCtACC	***************************************		nAACnAAC, nAACnAAU>nAAU					aGCAaGCG>aGCGaGCG				tACGtACC, tACGtACG>tACCtACC				Other cancers		
														Immunotherapy: vGUAvGUG, vGUGvGUG>vGUAvGUA						Treatment Effect	All cases	
																		Same curve as DQ_23 pccUpccU>pcccpccc, pccccpccc	no adjuvant therapy:  pCCUpCCU>pCCCpCCU, pCCCpCCC	Headilient Ellect	Stomach Cancer	

Diagram 81

DR		Total			All cases	Stomach Cancer
	No. of	Total	Stomach	Other cancers	Treatment Effect	į
	Diversity					
18						!
DQNP135	ယ					!
DQNP140						1
DQNP147	2					
DQNP150						
DQNP154						
DQNP169						1
DQNP191						
DQNP210						1
DQNP213	2			1		
DQNP215						
DQNP218						
DQNP235	2					

Diagram 82

DQNP94	DQNP93	DQNP91	DQNP78	DQNP77	DQNP72	DQNP62	DQNP57	DQNP49	DQNP48	DQNP47	DQNP38	DQNP35	DQNP27	DQNP25	DQNP 21	DQNP19	-15	-23	-29	Acid		R
2	2	2	2	4	2	2	6	3	2	ယ	3	2	2	2	ω	8	2	2		Diversity		
				Chemotherapy: rAGGrAGG>rAGArAGG, rAGArAGA	The Same curve with DQ19 rCGGrCGG, rCGArCGG>rCGArCGA						Chemotherapy: aGCAaGCG>aGCGaGCG				no adjuvant therapy: tACCtACG>tACAtACG	no adjuvant therapy: nAACnAAC, nAACnAAU> nAAunAAu				וופמנווופווג בוופטנ	Other cancers	
																				Family	Capperin	
																				30000	Alcohol	
		ICUGICUG(39.7), ICUGIUUG(26.8), IUUGIUUG(31.8)																			Metastases	
					rCGArCGA(39.1), rCGrCGG(39.8), rCGGrCGG(54.7)	000000000000000000000000000000000000000										nAACnAAC(54.7), nAACnAAU(59.8), nAAUnAAU(39.1)				d	Smoking	

<del>Diagram</del> 83

DQNP235	DQNP218	DQNP215	DQNP213	DQNP210	DQNP191	DQNP169	DQNP154	DQNP150	DQNP147	DQNP140	DQNP135	DQNP118	Nucleic Acid		DR
2	2	2	2	2	2	2	2	2	2	4	သ	2	No. of Diversity		
										no adjuvant therapy: aGCCaGCC>aCGUaGCU Immunotherapy: tACCaGCU>tACCaGCC			Treatment Effect	Other cancers	
													Cancer in Family		
				ICUCICUC(50), ICUCICUG(18.6), ICUGICUG(22.5)						TACCtACC(50), tACCtACU(21.3), tACUtACU(20.5)			Alcohol		
		LCUUICUU(47.8), ICUGICUU(24.5), ICUGICUG(32.1)	ICUCICUC(32.6), ICUUICUU(34.4)			dGACdGAC(32.6), dGACdGAU(27.1), dGAUdGAU(34.4)			ICUCICUC(47.8), ICUUICUU(32.1)		dGACdGAC(32.6), dGACdGAU(27.1), dGAUdGAU(34.4)		Metastases		
													Smoking		

84 / 129

Hig. Diagram 84

	Jiagiaiii o i				_		
DP		Total	i		<u> </u>		
					All Cases	Stomach Cancer	Other cancers
Acid [	No. of Diversity	Total	Stomach	Other cancers	Treatment Effect	Treatment Effect	Treatment Effect
98	2	All same with the survival curve					
107	2	All same with the survival curve					
118	2	All same with the survival curve					
167	2	All same with the survival curve					
179	2	All same with the survival curve					
					<u> </u>		
		All NS			T		

85 / 129

Fig. <del>Diagram</del> 85

Position		Dive	erse Am	ino Acid			no adjuvant therapy	Chemotherapy	Immunotherapy	
_29	M	- I					M	M	M	
_28	М						М	M	М	
_27	V						V	V	V	
_26	L						Ĺ	L	L	
_25	Q						Q	Q	Q	1
24	$\frac{\overline{v}}{v}$						- <del>v</del>	V	T v	<del> </del>
_24										+
_23	S						S	S	S	<del>-</del>
_22	Α						Α	A	Α	
_21	Α						Α	A	A	
_20	Р				-		Р	P	Р	
_19	Q						R	R	R	
_18	T						T	Т	T	
_17	v						· v	v	v	<del> </del>
		-								<del> </del>
_16	A	-					A	Α	Α	
_15	L						L	L	L L	
_14	T						T	Т	Т	
_13	A						Α	Α	Α	
_12	L						L	L	L	
11	Ĺ						ī	Ī.	† · · · · · · · L	
_10	M			+			M	M	M	+
				-				V	V	<del></del>
_9	V									
8	L						L	L	L	
_7	L						L	L	L	
_6	T						T	Т	T	
_5	S						S	S	S	
4	V	-					V	V	V	
	v			-			v	Ť v	† <del>`</del>	
_3										
_2	Q						Q	Q	Q	
1	G						G	G	G	
1	R						R	R	R	
2	Α						Α	Α	Α	
3	T						T	T	Т	
4	Р						P	P	Р	
	E						Ė	E	E	<del></del>
5	<u> </u>									+
6	N						N	N	N	
7	Υ						Υ	Υ	Y	
8	L	V					L or V	L or V	L or V	
9	F	Н	Y				0	0	0	DP8 LV and DP F
10	Q						Q	Q	Q	1
11	Ğ	L				-	G or L	G or L	G or L	
12	R	-					R	R	R	<u> </u>
12	~							+	+	+
13	Q	1		$\vdash$			Q	Q	Q	
14	E						E	E	E	<u> </u>
15	O						С	С	C	
16	Y						Υ	Y	Y	
17	A						Α	Α	Α	
18	F						F	F	F	i
19	N			<del>                                     </del>			N	N	N N	<del> </del>
				<del> </del>						+
20	G			<b>  </b>		<u> </u>	G	G	G	+
21							Ţ	T	T	
22	ø		L				Q	Q	Q	
23	R						R	R	R	
24	F				., .,		F	F	F	
25	Ė	<b></b>					L	L	L	
26	Ē					-	Ë	E	E	+
20	<u> </u>			<del>                                     </del>		-	<u> </u>	+	<del>-</del>	
27	R						R Y	R Y	R Y	+
28						i		ı <b>V</b>	· V	

86 / 129

Fig. Diagram 86

Position		Div	verse A	mino Acid		no adjuvant therapy	Chemotherapy	Immunotherapy	
29	1					I	I	ı	
30	Υ					Υ	Y	Y	
31	N					N	N	N	
32	R					R	R	R	
33	E					E	E	E	
34	Ē					E	Ē	Ē	
35	F	L	Υ	-		0	0	0	
36	A	V			<del></del>	A or V	A or V	ÄV	
37	R		-	-		R	R	R	
38	F					F	F	F	
39	<u> </u>					D	D	D	
40	S				<del></del>	S	S	S	
						D	D	D	
41	D					V	V	V	
42	V								
43	G			<del></del>		G	G	G	<b></b>
44	E			<b></b>		E	E	E	
45	F			ļļ.		F	F	F	
46	R					R	R	R	
47	Α					A	A	A	
48	V					V	V	V	ļ
49	T			li.		T	<u>T</u>	Ţ	
50	E					E	E	E	
51	<u>L</u>					L	L	L	
52	G	i				G	G	G	
53	R					R	R	R	
54	Р					Р	Р	Р	
55	Α	D	Е			AD	0	0	
56	Α	Е				0	. 0	()	
57	D	Е				0	DE	()	
58	Υ					Υ	Υ	Υ	
59	W					W	W	W	
60	N					N	N	N	
61	S					S	S	S	
62	Q					Q	Q	Q	
63	K					K	К	К	
64	D					D	D	D	
65	F	1	L			IL	I or L	l or L	
66	Ŀ	<del>                                     </del>				L	L	L	
67	E			<del>                                     </del>		Ē	Ē	Ē	
68	E			<del>                                     </del>		Ē	E	E	
69	Ē	K		1		EK	E or K	E or K	
70	R	<u> </u>	<del></del>	<del>                                     </del>	<del></del>	R	R	R	<del> </del>
71	A	-		<del>                                     </del>		A	Ä	Ä	
72	₩ Ç	-		<del>                                     </del>		V	V	†	+
73	P			<del>  -</del>		P	P	P	
74	Б	<del></del>		<del> </del>		D	D	D	<u> </u>
75	R	<b> </b>	<b></b>	<del>                                     </del>		R	R	R	<u> </u>
		1 14	1/	1			0	IM	
76	1	М	V			0		C	
77	C		-			C	C C	R	
78	R	-	<del> </del>	+		R	R		ļ
79	Н					H	Н	H	1
80	N					N	N	N	-
81	Υ	ļ				Y	Y	Y	ļ
82	E	<u> </u>				E	E	E	
83	L		1			L	L	L	
84	D	G				0	DG	0	ļ
85	E	G				0	EG	0	

87 / 129

Fig. <del>Diagram</del> 87

Position		Dive	rse Amino Acid	no adjuvant therapy	Chemotherapy	Immunotherapy	
86	Α	Р		0	0	()	
87	М	V		Ŏ	Μ̈́V	Ŏ	
88	T			Ť	Т	Ť	
89	L			L	L	L	
90	Q			Q	Q	Q	
91	R			R	Ř	R	<del> </del>
92	R			R	R	R	-
93	V			V	v V	V	
				à	- v q	Q	_
94	Q	-					
95	Р			P	Р	P	
96	K	R		0	0	0	<u> </u>
97	V			V	V	V	
98	N			N	N	N	
99	٧			V	V	V	
100	S			S	S	S	
101	Р			Р	Р	Р	
102	S			S	S	S	
103	K			K	K	K	
104	K			К	K	K	
105	G			G	G	G	
106	P			P	P	P	
107	L			<del>i</del>	i i	Ĺ	
108	Q			Q	Q	Q	
		-		Н	H	— ч	
109	H						
110	Н			H	Н	Н	
111	N			N	N	N	
112	L			L	L	L	
113	L			L L	L	L	
114	٧			V	V	V	
115	С			С	С	С	
116	Н			H	Н	Н	
117	V			<	٧	V	
118	T			T	Т	Т	
119	D			D	D	D	
120	F			F	F	F	
121	Y			Y	Υ	Υ	
122	Р			P	Р	P	_
123	G		<del>   </del>	G	G	Ğ	
124	s			S	S	Š	+
125	1			1	<u> </u>	<u>s</u>	<del></del>
				- Q	Q	Q	
126	Q	-					<del></del>
127	V			V	V	V	
128	R			R	R	R	
129	W			W	W	W	
130_	F			F	F	F	
131	L			L	L	L	
132	N			N	N	N	
133	G			G	G	G	
134	Q			Q	Q		
135	Ē			E	Ē	Q E	
136	Ē	<del> </del>		Ē	E	E	
137	T	<del>                                     </del>	<del>         </del>	T	Ť	T	
138	A			Ä	Ä	Ä	+
130	<del>  ^</del>	<del>  </del>		G	G	G	
139	G						+
140	V	<b>  </b>		V	V	V	
141	V	<b>  -</b>		V	V	V	
142	S			S	S	S	
143	Т			Т	T	T	
144	N			N	N	N	

88 / 129

Fig. <del>Diagram</del> 88

Position		Di	verse A	mino Ac	bid	no adjuvant therapy	Chemotherapy	Immunotherapy	
145	L					L	L	L	
146						l l		I	
147	R					R	R	R	
148	N					N	N	N	
149	G					G	G	G	
150	D					D	D	D	
151	W					W	W	W	
152	Т					Т	Т	T	
153	F					F	F	F	
154	Q					Q	Q	Q	
155	1					1	l	l	
156	L					L	L	L	
157	V					V	٧	V	
158	М					М	M	М	
159	L					L	L	L	
160	Е					E	E	E	
161	М					М	M	M	
162	T					T	Т	T	
163	Р					Р	Р	Р	
164	Q					Q	Q	Q	
165	Ø					Q	Q	Q	
166	G					G	G	G	
167	D					D	D	D	
168						V	٧	V	
169	Υ					Y	Υ	Υ	
170		Т				0	()	0	
171	С					Ĉ	Ċ	Č	
172	Q					Q	Q	Q	
173	V					V	٧	V	
174	E					Ε	E	E	
175	Н				Ī	Н	H	Н	
176	Τ					T	T	Т	i
177	S					S	S	S	
178	L	М				LM	0	0	
179	D					D	D	D	
180	S					S	S	S	
181	Р					Р	Ρ	P	
182	V					V	>	V	
183	T					T	T	T	
184	>					 >	٧	V	
185	E					E	E	E	
186	W					V	W	W	
187	K					K	K	K	
188	Α					Α	A	Α	
189	Q					Q	Q	Q	
190	S					S	S	S	
191	D					D	D	D	
192	S					s	S	S	
193	Α					Α	À	Α	
194	R					R	R	R	
195	S					S	S	S	
196	K					K	K	K	
197	T					T	T	Т	
198	L					L	L	L.	
199	T					 T	Т	Т	
200	G					G	G	G	
201	Α					Α	Α	Α	
202	G					G	G	G	
203	G					G	G	G	

89 / 129

Fig. <del>Diagram</del> 89

Position		Di	verse A	mino Ac	id	no adjuvant therapy F	Chemotherapy	Immunotherapy	
204	F						F	F	
205	V					V	V	V	
206	L					L	L	L	
207	G					G	G	G	
208	L					L	L	L	
209	1					1		1	
210	I					ı		1	
211	С					С	С	С	
212	G					G	G	G	
213	V					V	V	V	
214	G					G	G	G	
215	ı					1	Ī	l	
216	F					F	F	F	
217	М					М	M	M	
218	Н					Н	Н	Н	
219	R					R	R	R	
220	R					R	R	R	
221	S					S	S	S	
222	K					K	K	K	
223	<u>к</u>					K	K	K	
224	V					V	٧	V	
225	Q					Q	Q	Q	
226	R					R	R	R	
227	G					G	G	G	
228	S					S	S	S	
229	Α					Α	Α	A	

"or" - expected to be the same antigen

90 / 129

Fig.

Diagram 90

Position		Di	verse A	mino Aci	d	no adjuvant therapy	Chemotherapy	Immunotherapy	
_32	М					M	M	M	
_31	S					S	S	S	
_30	W					W	W	W	
_29	K					K	K	K	
_28	K					K	K	K	
_27	A	S				0	():e	()	
_26	L					L	Ľ	Ľ	
_25	R		"			R	R	R	
24	1						ĺ	l l	
_23	Р					Р	Р	Р	
_22	G					G	G	G	
_21	D	G				GG	()	GG	
_20	L					L	Ľ	L	
_19	R					R	R	R	
_18	Α	V				0	0	()	
_17	Α					Ă	Ä	Ä	
_16	T					Т	T	Т	
_15	V					V	٧	V	
_14	T					Т	T	Т	
_13	L					L	L	L	
_12	М					М	M	M	
_11	L					L	L	L	-
10	Α	S				0	0	()	
_9	1	М				Ö	Ö	Ü	
8	L					Ľ	Ĺ	L.	
_7	S					S	S	S	
_6	S	T				TT	0	TT	
_5	L	Р	S			0	0	PP	
_4	L	V				Ŵ	Ö	W	
_3	Α					Α	Ä	Α	
_2	E					E	E	E	
1	G					G	G	G	
1	R					R	R	R	
2	D					D	D	D	1
3	Р	S				SS	PS	P or S	
4	Р					Р	Р	Р	
5	E					E	E	E	
6	D					D	D	D	
7	F					F	F	F	
8	V					V	V	V	
9	l-	L	Y			0	LY	YY	DQ3 PS is same as DQ9 L
10	Q					Q	Q	Q	
11	F					F	F	F	
12	K				I	K	K	K	
13	Α	G				0	AA	GG	
14	L	М				L or M	L or M	LM	
15	С					С	С	С	
16	Υ					Y	Υ	Υ	
17	F					F	F	F	
18	T					Т	Т	Т	
19	N					N	N	N	
20	G			<u> </u>		G	G	G	
21	Т					Т	Т	Т	
22	E					E	E	E	
23	L	R		L		LR	L or R	RR	
24	V					V	V	V	
25	R					R	R	R	
26	G V	L	Υ			0	()	0	
27						V	V	V	

### 91 / 129

### にらい <del>Diagram</del> 91

Position   Diverse Amino Acid   no adjuvant therapy   Chemotherapy   Immunotherapy	D141	τ	D:	A		A = ( a)	no odiniont thomas	Chamatharan	I Image of the second	<del> </del>
29	Position		Dive	se A	mino	ACIO	no adjuvant therapy	Chemotherapy	Immunotherapy	
30					$\vdash$					<del></del>
31			_	$\overline{}$					LIV LIV	
32		_	0	1						
33	31									
34					-					<del> </del>
Signature   Sign										
Se							<u> </u>	K	<u> </u>	
37							<u> </u>	<u> </u>		
38							<u> </u>		<u> </u>	
38	37	ן ט	'	Y		1	YY	DY	0	
39	- 00	-	.,				0.551/	0.001/	A ==\/	DQ3/I
40			V							
41										
42										
43										
44							3	5	5	
45										
46					$\vdash$					
A				<u> </u>	<b> </b>					DOOR ST in accord
A8	46	E					0			DQ46VE
49         A         A         A         A         A         A         A         A         A         A         A         A         B         B         B         B         V         DDG28 ST is same as DQ65 PL         DDG55 L			Υ							
SO		R								
Si									Α	
S2	50	V								
DG52PL   DG52PL   DG52PL   DG52PL   DG54   DG	51	T					Т			
S4	52	L	Р				0	0	0	
S4	53	L	Q				LL	L or Q	L or Q	
S5		G					G	G		
S7			Р	R				P or R	PorR	
S7	56	L	Р				LP	PP	LorP	
S8		Α	D	S	V		0			
S9	58	Α							A	
60 Y	59	Е						E		
61 W W W W W W W G W W G G S N S S S S S S S S S S S S S S S S							Y	Y		
62		W					W	w	W	
63         S         EE		N					N	N	N	
64         Q		S					S	S	S	
65								Q		
66         D E         DE         DE         EE           67         I V         IV         IV         VV           68         L         L         L         L         L           69         E         G         R         O         A										
67         I         V         IV         IV         VV         VV         68         L         N         L         N </td <td></td> <td></td> <td>E</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>			E							
68         L         E         E         E         E         E         E         E         E         E         E         E         E         E         E         D         N         N         N         N         N         N         N         N         N         N         N         N         N         N		_	V							
69         E         F         E         E         E         E         E         E         E         E         E         E         F         TO		L						L	L	
70         E         G         R         () <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>E</td> <td>E</td> <td>E</td> <td></td>							E	E	E	
71         A         D         K         T         ()         ()         AT           72         R         R         R         R         R         R           73         A         A         A         A         A         A         A           74         A         E         S         ES         ()         ES         ()         ES         ()         C         C         C         O         D         T         T         Y			G	R						
72         R         R         R         R         R         R         R         R         R         R         R         R         A         B	71				Т				AT	
73         A										
75         L         V         LV         () <td></td> <td>_</td> <td></td> <td></td> <td></td> <td></td> <td>A</td> <td></td> <td>-t</td> <td></td>		_					A		-t	
75         L         V         LV         () <td>74</td> <td></td> <td>E</td> <td>S</td> <td></td> <td></td> <td>ES</td> <td></td> <td>ES</td> <td></td>	74		E	S			ES		ES	
76         D         D         D         D           77         R         T         ()         ()         RT           78         V         V         V         V           79         C         C         C         C           80         R         R         R         R           81         H         H         H         H         H           82         N         N         N         N         N           83         Y         Y         Y         Y         Y           84         E         Q         QQ         ()         QQ         QQ           85         L         V         LL         ()	75			<u> </u>			LV		0	
77         R         T         ()         ()         RT           78         V         V         V         V           79         C         C         C         C           80         R         R         R         R           81         H         H         H         H         H           82         N         N         N         N         N         N         N           83         Y <td< td=""><td>76</td><td></td><td></td><td></td><td></td><td></td><td></td><td>Ď</td><td>Ď</td><td></td></td<>	76							Ď	Ď	
78         V         D         C         N         Y         Y         Y	77		Т						RT	
79         C         C         C         C           80         R         R         R         R           81         H         H         H         H           82         N         N         N         N           83         Y         Y         Y         Y           84         E         Q         QQ         ()         QQ           85         L         V         LL         ()         ()         ()	78			<u> </u>			V	V	V	
80         R         R         R         R           81         H         H         H         H         H           82         N         N         N         N         N           83         Y         Y         Y         Y         Y           84         E         Q         QQ         ()         QQ         QQ           85         L         V         LL         ()	79						С	С	С	
81     H     H     H     H       82     N     N     N     N       83     Y     Y     Y     Y       84     E     Q     QQ     ()     QQ       85     L     V     LL     ()     ()				<b></b>			R	R	R	
82         N         N         N         N           83         Y         Y         Y         Y           84         E         Q         QQ         ()         QQ           85         L         V         LL         ()         ()         ()			t				Н	H	Н	
83         Y         Y         Y         Y           84         E         Q         QQ         ()         QQ           85         L         V         LL         ()         ()         ()			T				N			
84         E         Q         QQ         ()         QQ           85         L         V         LL         ()         ()					1		Y		Y	
85 L V LL () ()			Q						QQ	
86 A E G 0 0 EG	85	-	v	T				Ŏ	0	
				G			0		EĞ	

92 / 129

Fig. <del>Diagram</del> 92

S7   F   L   Y   FY   ()	LY  R () () () L Q R R R V E
88       R         89       G       T         90       I       T         91       L         92       Q         93       R         94       R         95       V         96       E         97       P         98       T         7       T         99       V	R () () () () () () () () () () () () ()
89     G     T     TT     ()       90     I     T     TT     ()       91     L     L     L     L       92     Q     Q     Q     Q       93     R     R     R     R       94     R     R     R     R       95     V     V     V     V       96     E     E     E     E       97     P     P     P     P       98     T     T     T     T       99     V     V     V     V	() () () () () () () () () () () () () (
90         1         T         TT         ()           91         L         L         L         L           92         Q         Q         Q         Q           93         R         R         R         R           94         R         R         R         R           95         V         V         V         V           96         E         E         E         E           97         P         P         P         P           98         T         T         T         T         T           99         V         V         V         V         V	() L Q R R V E
91         L         L         L           92         Q         Q         Q           93         R         R         R         R           94         R         R         R         R           95         V         V         V         V           96         E         E         E         E           97         P         P         P         P           98         T         T         T         T         T           99         V         V         V         V         V	L Q R R V E E
92         Q         Q         Q           93         R         R         R         R           94         R         R         R         R           95         V         V         V         V           96         E         E         E         E           97         P         P         P         P           98         T         T         T         T         T           99         V         V         V         V         V	Q R R V E
93         R	R R V E
94         R         R         R           95         V         V         V           96         E         E         E           97         P         P         P           98         T         T         T         T           99         V         V         V         V	R V E
95         V         V         V           96         E         E         E         E           97         P         P         P         P         P           98         T         T         T         T         T         T         T         V         V         V	V E
96         E         E         E           97         P         P         P           98         T         T         T         T           99         V         V         V         V	
98 T T T T 99 V V	
99 V V V	P
	Т
	V
	T
101 I I	Ī
102 S S	S
103 P P P	P
104 S S S	S
105 R R R	R
106 T T T	T
107 E E E	E
108 A A A	A
109 L L L	L L
110 N N	N
111 H H	Н
112 H H H	Н
113 N N N	N
114 L L L	L
115 L L L	L
116   I   V   0   0	IV
117 C C C	C
118 S S S	S
119 V V	V
120 T T T	T D
121   D   D   D   D   T   F   F   F   F   F   F   F   F   F	
	F
123 Y Y Y 124 P P P	P
125 A G S GS () 126 H Q () HQ	0
126 H Q U HQ	Y
127 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	K
128 K V V V	V V
130 Q R () RR	QR
131 W W W	W
132 F F F	F
133 R R R	R
134 N N N	N N
135 D D D	D
136 Q Q Q	Q
137 E E E	E
138 E E E	E
139 T T	T
140 A T TT ()	0
141 G G G	Ğ
142 V V	V
143 V V	V
144 S S S	S
145 T T T	Ť

93 / 129

## Fig. Diagram 93

Position		Div	erse Ami	ino Acid		no adjuvant therapy	Chemotherapy	Immunotherapy	
146	Р					Р	Р	Р	
147	L					L,	7	L	
148						l		ľ	
149	T					T	T	T	
150	N					N	N	N	
151	G					G	G	G	
152	Ď					D	D	D	
153	W		<del></del>		-+	w	w	W	
154						T	T	T	
					<del></del>	F			
155	F						F	F	
156	Q					Q	Q	Q	
157	!					1	!	!	
158	L					L	L	L	
159	V					V	V	V	
160	М					M	M	M	
161	L					L	L	L	
162	E					E	E	E	
163	М					М	M	M	
164	T					Т	T	T	1
165	P					P	P	P	
166	Q					à	Q	· Q	†
167	H	R				0	HH	RR	
168	G					Ğ	Ğ	Ğ	
							D	D	
169						D			
170	V					V	V	V	
171	Υ					Y	Y	Y	
172						T	Т	Т	
173	C					С	С	С	
174	Ι					Н	Н	НН	
175	٧					V	V	V	
176	Е					E	E	Ė	
177	Ι		<u> </u>			Н	Н	Н	
178	Р					Р	Р	Р	
179	S					S	S	S	
180	L				1	Ĺ	Ī	L	
181	ā	-	<del></del>		_	ā	Q	ā -	
182	N	S				NN	$\frac{\tilde{\sigma}}{\tilde{\sigma}}$	0	
	P	3				P	P	P	
183	P							1	
184	<u> </u>					1	1		
185		T				II.	π	0	
186	V					V	V	<u> </u>	
187	E					E	E	E	
188	W					W	W	W	
189	R					R	R	R	
190	Α					Α	Α	Α	
191	Q					Q	Q	Q	
192	S					S	S	S	
193	E				1	Ē	Ē	Ē	
			+-			S	S	S	
194 195	A	<del>                                     </del>				A	Ā	A	
		<del>                                     </del>	<del></del>			Q	Q	Q	1
196	Q	<del>                                     </del>	<del></del>  -				NS NS		<del> </del>
197	N	S	$\longrightarrow$			SS		0	1
198	K		$\longrightarrow$			K	K	K	ļ
199	M					M	М	M	
200	L					L	L	L	
201	S					S	S	S	
202	G					G	G	G	
203	i i	V				0	()	0	
,						Ğ	Ğ	Ğ	<del></del>

94 / 129

Fig.
Diagram 94

Position		Div	verse Amino	Acid	no adjuvant therapy	Chemotherapy	Immunotherapy	
205	G				G	G	G	
206	F				F	F	F	
207	V				V	V	V	
208	L				L	L	L	
209	G				G	G	G	
210	L				L	L	L	
211	- 1				l l	l	I	
212	F				F	F	F	
213	L				L	L	L	
214	G				G	G	G	
215	L				L	L	L	
216	G				G	G	G	
217	L				L	L	Ļ	
218	1					1		
219	1	i i			1	1	l l	
220	Н	R			HH	0	()	
221	Н	Q			HH	Ö	Ö	
222	R				R	Ř	Ř	
223	S				S	S	S	
224	Q	R			0	()	QR	
225	K				K	K	K	
226	G				G	G	G	***
227	Р				Р	Р	Р	
228	α				Q	Q	Q	
229	G				G	G	G	
230	Р				Р	Р	Р	
231	Р				P	Р	Р	
232	Р				Р	P	Р	
233	Α				Α	Α	Α	
234	G				G	G	G	
235	لـ				L	L	L	
236	L				L	L	L	
237	Н				Н	Н	Н	

95 / 129

Fig. Diagram 95

Position		Di	verse A	mino Ad	id		no adjuvant therapy	Chemotherapy	Immunotherapy	
_29	М						М	М	M	
_28	V						V	V	V	
27	С						Ċ	С	С	
26	L						Ĺ	L	L	
	ĸ	R					RR	RR	RR	
24	F	L					ForL	ForL	F or L	
23	P			-			P	P	P	
								G		
_22	G						G		G	
_21	G						G	G	G	
_20	S						S	S	S	
_19	C						С	C	С	
_18	M						M	М	M	
_17	Α	T					AA	AA	AA	
_16	Α	V					VV	W	A or V	
_15	L						L	L	L L	
_14	T						Т	Т	Т	
_13	V						V	V	V	
12	T						Т	Ť	T	
_11	Ĺ						<u> </u>	Ĺ	i i	
10	М						М	M	M	
9	v						V	V	V	
<del>-</del> 8	L						L	L	L	
							S	S		
8	<u>s</u>								S	
_6	S						S	S	S	
_5	Р						Р	P	Р	
_4	L						L	L	L	
_3	_ A						Α	Α	Α	
_2	L						L	L	L	
1	Α	S					A or S	A or S	AA	
1	G						G	G	G	
2	D						D	D	D	
3	Ţ						T	T	T	
4	Q	R					Q or R	Q or R	QR	
5	Р						Р	Р	P	
6	R						R	R	R	
7	F						F	F	F	
8	Ĺ						Ĺ	L	<u> </u>	
9	Ē	К	W				0	ww	ĸW	
10	Ē	Q	Y				₩		0	
			<u></u>	P		V		0	DP	
11	D	G	_ L		S		DS	() V == T		-
12	K					- V	K or T	K or T	K or T	
13	F	G	Н	R	S	Y	GH	0	FS	
14	E	K					E or K	E or K	E or K	
15	С						С	С	С	
16	Н	Q	Y				0	YY	00	
17	F						F	F	F	
18	F						F	F	F	
19	N						N	N	N	
20	G						G	G		
21	T						Ť	T	G T	
22	Ė						Ē	Ė	Ē	
23	R						R	R	R	
24	$\frac{V}{V}$					<u> </u>	V	V	V	
25	<del>_</del> Q	P			<del></del>		Q or R	Q or R	Q or R	
20		R				ļ				
26	F	L	Υ			ļ	FL	0	FL	
27	<u> </u>					ļ	L	L	L	
28	D	E	Н				0	0	Q	
29	R						Ř	Ř	Ř	
30	С	G	Н	L	R	Y	0	()	0	

96 / 129

### Fig. <del>Diagram</del> 96

Position		Di	verse A	mino Ad	oid		no adjuvant therapy	Chemotherapy	Immunotherapy	
31	F	1	V				Forl	F or 1	FI	
32	Н	Y					HH	()	0	
33	н	N			1		0	()	HH	
34	Q						Q	Q	Q	
35	E						E	E	E	
36	E						Ε·	E	E	
37	F	L	N	S	Y		0	LY	NS	
38	Α	L	V				0	0	W	
39	R						Ř	Ř	R	
40	F	Υ					ForY	F or Y	FF	
41	D						D	D	D	
42	S						S	\$	S	
43	D						D	D	D	
44	V						V	V	V	
45	G						G	G	G	******
46	E						Ē	E	E	
47	F	Υ					ForY	F or Y	ForY	
48	R					$\overline{}$	R	R	R	
49	Α						A	A	Ä	
50	V						V	V	V	
51	T						Т	Ť	Ť	
52	Е		_				E	E	Е	
53	L						L	L	L	
54	G						G	G	G	
55	R						R	R	R	
56	Р						Р	Р	Р	
57	Α	D	S	V			AV	AV	AV	
58	Α	Е					A or E	A or E	A or E	
59	Ε						Е	Е	E	
60	Н	S	Υ				()	YY	HS	
61	W						Ň	W	W	
62	N						N	N	N	
63	S						S	S	S	
64	Q						Q	Q .	Q	
65	K						K	K	K	
66	D						D	D	D	
67	F		L				FF	FI	FL	
68	L						L	L	L	
69	Е						E	E	E	
70	D	Q	R				0	DD	0	
71	Α	E	K	R			A	Α	Ä	
72	R						R	R	R	
73	Α	G		L			AA	A or G	A or G	
74	Α	Е	L	Q	R		()	LL	AE	
75	>	L					V	٧	V	
76	D						D	D	D	
77	N	T					N or T	N or T	N or T	
78	V	Υ					V	V or Y	VY	
79	С						С	С	С	
80	R						R	R	R	
81	Н						Н	H	н	
82	N						N	N	N	
83	Υ						Υ	Y	Y	
84	G						G	G	G	
85	Α	V					A or V	A or V	W	
86	G	V					<b>~</b>	GV	GG	
87	E						Ε	E	E	
88	S						S F	S	S	
89	F						F	F	F	

97 / 129

Fig. Diagram 97

Position		Div	erse A	mino Ac	id	no adjuvant therapy	Chemotherapy	Immunotherapy	
90	T					T	Т	Т	L
91	V					<b>\</b>	٧	V	
92	Q					Q	Q	Q	
93	R					R	R	R	
94	R					R	R	R	
95	Ÿ					V	V	V	
96	Ě	Н	Q	Y		EQ	0	0	
97	P	''		•		P	P	P	
98	É	к				EK	E or K	ĖK	<del> </del>
	- <del>-</del> -					V	V	V	
99						T	T	T	
100	T					\ \\ \\ \\ \	V	V	
101	V							V	
102	Υ					Υ	Y	Y	
103	P					Р	Р	Р	
104	A	S				AA	A or S	AK	0
105	K					K	K	K	
106	T					T	T	T	
107	Q					Q	Q	Q	
108	P					Р	P	P	
109	L					L	L	L	
110	Q					Q	Q	Q	
111	Н					H	H	H	
112	H			<del>                                     </del>		H	Н	H	<u> </u>
						N	N N	N	<del> </del>
113	N					L	L	L	
114	Ŀ		<u> </u>				L	<u> </u>	1
115	L_			<u> </u>		L	V	<del>                                     </del>	
116	V			<u> </u>		V		r č	
117	С					C	C	<u> </u>	
118	S					S	S	S	
119	V					V	V	V	
120	N	S				S or N	NN	SS	
121	F					F	F	F	
122	G	ľ				G	G	G	
123	Y					Y	Y	Y	
124	Р					Р	Р	Р	
125	G					G	G	G	
126	S					S	S	S	
127	Ť			<b>†</b>		1	Ī	1	1
128	Ė	<del> </del>		<del> </del>	<del>                                     </del>	E	Ė	E	
	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			<del> </del>		<del>                                     </del>	V	<del>                                     </del>	+
129		ļ	<del> </del>	<del> </del>	<del> </del>	R	R	R	
130	R		-	<del> </del>	<del>                                     </del>	W		W	
131	w	-					W		
132	F	<u> </u>		ļ	<del></del>	F	F	F	1
133	L	R		1		RR	L or R	RR	
134	N					N	N	N	<u> </u>
135	G		<u></u>			G	G	G	
136	Q					Q	Q	Q	
137	E					E	E	E	
138	E	1				E	Е	E	
139	K			1		К	К	K	
140	A	Т		<b>†</b>		0	Π	0	
141	Ĝ	† <u> </u>	1	1	<del>                                     </del>	Ğ	G	Ğ	1
142	М	V	<del> </del>	†	<del>                                     </del>	W	M or V	w	
143	V	<u> </u>		+	+ +	† <u>v</u>	V	V	†
		<del>                                     </del>	<b> </b>	<del> </del>	<del>                                     </del>	S	S	S	+
144	S	<del></del>	-	+	<del>                                     </del>	T	T	T	
145	T	<del> </del>	-	+	<del> </del>			G	
146	G	<del> </del>	<del> </del>	<del> </del>		G	G		
147	L	<u> </u>	ļ	<b>_</b>	<del> </del>	<u> </u>	L L	L	<del> </del>
148			L					1	_l

### 98 / 129

### √ig. <del>Diagram</del>98

Position		Div	erse Amin	Acid .	no adjuvant therapy	Chemotherapy	Immunotherapy	
149	Н	Q			H or Q	HH	HH	
150	N				N	N	N	
151	G				G	G	G	
152	D				D	D	D	
153	W				W	W	W	
154	Т				T	T	Т	
155	F				F	F	F	
156	Q				Q	Q	Q	
157	T				Т	Ť	T	
158	L				L	L	L	
159	V				V	٧	V	
160	М				M	М	M	
161	L				L	L	L	
162	Ē		-		E	E	E	
163	T				T	T	T	
164	F	V			0	0	0	
165	P				P	P	Р	
166	à	R			QorR	Q or R	RR	
167	S				S	S	S	
168	Ğ				G	G	G	
169	E				E	E	E	
170	v	·			V	V	V	
171	Y				Y	Y	Y	
172	T				Т	T	Ť	
173	Ċ	i		1	С	С	С	
174	à				Q	Q	Q	
175	V				V	V	V	
176	Ē			1-1-	E	E	E	
177	H	1			Н	Н	Н	
178	P	- I		<del> </del>	Р	Р	P	
179	S				S	S	S	
180	Ľ	V			L or V	L or V	L or V	
181	м	Ť			0	0	0	
182	S		-		š	Š	Š	
183	P				Р	Р	P	
184	L	<del></del>	-		L	L	L	
185	Ŧ				TT	Ť	T	
186	V				V	V	V	
187	E			·	E	E	E	
188	w				W	W	W	
189	R	S			RR	RorS	RorS	
190	A			<u> </u>	A	Α	Α	
191	R		<u> </u>		R	R	R	
192	S				S	S	S	
193	E				Ě	Ē	Ě	
194	S				S	S	S	
195	Ā				A	A	A	
196	Q	<del>  </del>			Q	Q	Q	
197	S	<del> </del>	<del></del>	<del></del>	S	S	Š	†
198	K	<del> </del>		-+	K	K	K	1
199	M		<del></del>		M	M	M	1
200	L	<del>                                     </del>	<del>                                     </del>		L L	L	L	1
201	s	1	-	<del>-   </del>	S	S	S	†
202	G	-	<del></del>		G	G	G	<del> </del>
	V	<del> </del>			<u>v</u>	V	V	<del>                                     </del>
203	G	-			G	Ğ	Ğ	<del> </del>
204 205	G	<del> </del>			G	G	G	+
205					F	F	F	<del>                                     </del>
206	F V	1	<del>  -</del>	<del></del>	<del>                                     </del>	V	V	-
207		1	LL_		v	J		1

99 / 129

Fig. <del>Diagram</del> 99

Position		Di	verse A	nino Ac	d	no adjuvant therapy	Chemotherapy	Immunotherapy	
208	L					L	L	L	
209	G					G	G	G	
210	L					L	L	L	
211	L					L	L	L	
212	F					F	F	F	
213	L					L	L	L	
214	G					G	G	G	
215	Α					Α	Α	Α	
216	G					G	G	G	
217	L					٦	L	L	
218	F					F	F	F	
219							1	l l	
220	Y					Υ	Y	Υ	
221	F					F	F	F	
222	R					R	R	R	
223	N					N	N	N	
224	Q					Q	Q	Q	
225	K					K	K	K	
226	G					G	G	G	
227	Н					Н	I	Н	
228	S					S	S	S	
229	G				l	G	G	G	
230	L					L	L	L	
231	Р	Q				P or Q	P or Q	QQ	
232	Ρ					Р	Р	Р	
233	R	Т				RorT	RorT	RorT	
234	G					G	G	G	
235	F					F	F	F	
236	L					L	L	L	
237	S					S	S	S	

#### 100 / 129

Position		Di	verse An	nino Acid	Amino Acid Configuration to Inhibit Metastases
_29	М				M
	M				M
_27	V				V
26	L				<u> </u>
_26					
_25	a:				Q
_24	V				V
_23	S				S
_22	Α				A
21	Α				A
_20	Р				P
_19	R				R
_18	T		<del></del>		T T
_17	·				v
17					
_16	Α				A
_15	L				L
_14	T				_  T
_13	Α				A
12	L				L
_11	L				L
10	M	-			M
	V		-		V
9 _8	L.				
_ <u>-</u> -		<u> </u>			L.
7	L				L
_6	T				T
<u>5</u>	S				S
4	٧				V
3 2	V				V
	Q				Q
_1	G			<del></del>	G
1					
	R				R
2	Α				A
3	Т				Т
4	P				P
5	E		Ī		E
6	N	·			N
7	Y				Y
8	L	V			Ö
9	F	H	Y		<u> </u>
40		п	- '		0
10	Q	<u> </u>			Q
11	G	L_			0
12	R				R
13	Q	L			Q
14	E				E
15	С				С
16	Y	<u> </u>			Y
17		<b></b>			A
1/42	A	ļ			<del></del>
18	F	ļ	<b>  </b>		F
19	N				N
20	G				G
21	Т				T
22	Q				Q
23	R	<u> </u>	<del> </del>	<del> </del>	R
24	F				F
25			<del> </del>		
25	<u> </u>		<del>                                     </del>		L
26	E				E
27	R				R
28	Υ				Y
29	1				I
30	Y				Y
1 30					

### 101 / 129

Position         Diverse Amino Acid         Amino Acid Config           31         N                     32         R                     33         E                     34         E                     35         F         L         Y           36         A         V                     37         R                               38         F                               39         D                               40         S                               41         D                               42         V                               43         G                               44         E                               45         F                               46         R                               47         A                               49         T                               50         E                               51         L                               52         G                     <th>guration to Inhibit Metastases  N R E E () () () R F D S D V G E F R A V T E L G R P AA</th>	guration to Inhibit Metastases  N R E E () () () R F D S D V G E F R A V T E L G R P AA
32 R 33 E 34 E 35 F L Y 36 A V 37 R 38 F 39 D 40 S 41 D 42 V 43 G 44 E 45 F 46 R 47 A 48 V 49 T 50 E 51 L 52 G 53 R 54 P 55 A D E 56 A E 57 D E 58 Y 59 W 60 N	R E E O O O R F D S D V G E F R A V T E L G R P
33 E 34 E 35 F L Y 36 A V 37 R 38 F 39 D 40 S 41 D 42 V 43 G 44 E 45 F 46 R 47 A 48 V 49 T 50 E 51 L 52 G 53 R 54 P 55 A D E 56 A E 57 D E 58 Y 59 W 60 N	E E O O O R F D S D V G E F R A V T E L G R P
34 E	E () () () () () () () () () () () () ()
35 F L Y 36 A V 37 R 38 F 39 D 40 S 41 D 42 V 43 G 44 E 45 F 46 R 46 R 47 A 48 V 49 T 50 E 51 L 52 G 53 R 54 P 55 A D E 56 A E 57 D E 58 Y 59 W 60 N	() () () () () () () () () () () () () (
36 A V 37 R 38 F 39 D 40 S 41 D 42 V 43 G 44 E 45 F 46 R 47 A 48 V 49 T 50 E 51 L 52 G 53 R 54 P 55 A D E 56 A E 57 D E 58 Y 59 W 60 N	() R F D S D V G E F R A V T E L G R
37 R 38 F 39 D 40 S 41 D 42 V 43 G 44 E 45 F 46 R 47 A 48 V 49 T 50 E 51 L 52 G 53 R 54 P 55 A D E 56 A E 57 D E 59 W 60 N	R F D S D V G E F R A V T E L G R P
38  F	F     D     S     D     V     G     E     F     R     A     V     T     E     L     G     R
39 D 40 S 41 D 42 V 43 G 44 E 45 F 46 R 47 A 48 V 49 T 50 E 51 L 52 G 53 R 54 P 55 A D E 56 A E 57 D E 58 W 59 W 60 N	D S D V G E E F R A V T E L G R P
40 S 41 D 42 V 43 G 44 E 45 F 46 R 47 A 48 V 49 T 50 E 51 L 52 G 53 R 54 P 55 A D E 56 A E 57 D E 58 Y 59 W 60 N	S D V G E F R A V T E L G R
40 S 41 D 42 V 43 G 44 E 45 F 46 R 47 A 48 V 49 T 50 E 51 L 52 G 53 R 54 P 55 A D E 56 A E 57 D E 58 Y 59 W 60 N	D V G E F R A V T E L G R
41 D 42 V 43 G 44 E 45 F 46 R 47 A 48 V 49 T 50 E 51 L 52 G 53 R 54 P 55 A D E 56 A E 57 D E 58 Y 59 W 60 N	D V G E F R A V T E L G R
42 V 43 G 44 E 45 F 46 R 47 A 48 V 49 T 50 E 51 L 52 G 53 R 54 P 55 A D E 56 A E 57 D E 58 Y 59 W 60 N	V G E F R A V T E L G R
43 G 44 E 45 F 46 R 47 A 48 V 49 T 50 E 51 L 52 G 53 R 54 P 55 A D E 56 A E 57 D E 58 Y 59 W 60 N	G E F R A V T E L G R
44 E 45 F 46 R 47 A 47 A 48 V 49 T 50 E 51 L 52 G 53 R 54 P 55 A D E 56 A E 57 D E 58 Y 59 W 60 N	E F R A V T E L G R
45 F 46 R 47 A 48 V 49 T 50 E 51 L 52 G 53 R 54 P 55 A D E 56 A E 57 D E 58 Y 59 W 60 N	F R A V T E L G R
46 R 47 A 48 V 49 T 50 E 51 L 52 G 53 R 54 P 55 A D E 56 A E 57 D E 58 Y 59 W 60 N	R A V T E L G R
47 A 48 V 49 T 50 E 51 L 52 G 53 R 54 P 55 A D E 56 A E 57 D E 58 F 59 W 60 N	A V T E L G R
48 V 49 T 50 E 51 L 51 L 52 G 53 R 54 P 55 A D E 56 A E 57 D E 58 Y 59 W 60 N	V T E L G R
49 T 50 E 51 L 52 G 53 R 54 P 55 A D E 56 A E 57 D E 58 Y 59 W 60 N	T E L G R
50 E 51 L 52 G 53 R 54 P 55 A D E 56 A E 57 D E 58 Y 59 W 60 N	E L G R
51 L	L G R P
51 L	G R P
52 G 53 R 54 P 55 A D E 56 A E 57 D E 58 Y 59 W 60 N	G R P
53 R 54 P 55 A D E 56 A E 57 D E 58 Y 59 W 60 N	R P
54 P 55 A D E 56 A E 57 D E 58 Y 59 W 60 N	P
55 A D E 56 A E 57 D E 58 Y 59 W 60 N	
56 A E	
57 D E	
58 Y	Ō.
59 W 60 N	() Y
60 N	
60 N	W
61 S	N
	S
62 Q	Q
63 K	Κ
64 D	D
65 F I L	0
	L
66 L	
67 E	E
68 E	E
69 E K	0
70 R	R
71 A	A
72 V	V
73 P	P
74 D	D
75 R	R
76   1   10   11   11   11   11   11   11	<u>''</u>
76 I M V	0
77 C	C
78 R	R
79 H	Н
80 N	N
81 Y	Υ
82 E	E
83 L	Ĺ
	0
84 D G	0
85 E G	
86 A P	0
87 M V	0
88 T	T
89 L	

102 / 129

Position	· / ·	Di	verse Ar	nino Aci	d	Amino Acid Configuration to Inhibit Metastases
90	Q					Q
91	Ř					R
92	R					R
93	V					V
94	Q					Q
95	P					P
96	ĸ	R				0
97	V					V
98	N					N
99	V					V
100	S		<del>  </del>			S
101	P					Р
102	S					S
103	K					K
104	K					K
105	G					G
106	P					P
107	L			<del></del>		L
108	ā					Q
109	H					H
110	H		1			H
111	N		1	<del>- +</del>		N
112	L		-			L
113	L		<del> </del>			<u> </u>
114	V	<del>                                     </del>				V
115	C					Č
116	Н		-			H
117	l "					Ÿ
118	T			_		T
119	D					Ď
120	F			-		F
121	Y					Y
122	P	<del></del>				P
123	Ğ					G
124	S		<del> </del>			S
125	i		1			
126	Q		_			Q
127	V		h			V
128	R		-			R
129	W	<del>                                     </del>	1	-		W
130	F	<del>                                     </del>	<del> </del>		<del></del>	F
131	Ĺ	<del>                                     </del>	<del> </del>			L
132	N	<del>                                     </del>	-	<del>                                     </del>		N
133	G	<del> </del>		<del></del>		G
134	Q		<del>                                     </del>	<b>-</b>		Q
135	E	<del> </del>	<del> </del>			E
		<del>                                     </del>	<del> </del>	+		E
136	E	-	<del> </del>	<del>                                     </del>		T
137			+	<del></del>		A
138	A G	<del> </del>	+			G
139			ļ			V V
140	V	<del>                                     </del>	1	<del>  </del>		V
141		<del> </del>	+	<del> </del>		S
142	S	-	<del> </del>			T T
143	T		+			N N
144	N	ļ	+	<del></del>		L
145	L_	ļ		ļ		
146	1	ļ				
147	R	ļ	-			R
148	N	<u> </u>	1	<u> </u>		N

103 / 129

Position		Di	verse Amino A	cid	Amino Acid Configuration to Inhibit Metastases
149	G		T T		G
150	Ď				D
151	W				W
152	Т				T
153	F				F
154	ā				Q
155	ī				I
156	Ŀ			<del>  </del>	L
157	V			<del> </del>	V
158	м			<del> </del>	M
159	L			<del> </del>	L
160	Ē			<del>                                     </del>	E
161	М			<del>                                     </del>	M
162				-	T
	T P		<u> </u>	<del> </del>	P
163				<del>                                     </del>	Q
164	ο			<del>  </del>	
165	Q			<del>                                     </del>	Q G
166	G		<del>                                     </del>	<del>  </del>	
167	D			1	D V
168	V		<del>                                     </del>		
169	Y	<del></del>		1	Y
170	1	T			0
171	С			<del>                                     </del>	C
172	Q				Q
173	V		<u> </u>	<del> </del>	V
174	E				E
175	Н				H
176	Т			ļ	T
177	S			<b></b>	S
178	L	M			0
179	D				D
180	S				S
181	Р				P
182	V				V
183	Т				Ţ
184	V				V
185	E				E
186	W				W
187	K				K
188	Α				A
189	Q				Q
190	S				S
191	D			1	D
192	S				S
193	Α				A
194	R				R
195	S				S
196	K				K
197	T				T
198	L	1			L
199	T			1 1	T
200	G				G
201	Α	<b>—</b>		1 1	A
202	G			† · · ·	G
203	Ğ		<del>                                     </del>	<del>                                     </del>	G
204	F	<u> </u>	1		F ·
205	l v	<del>                                     </del>		1	V
206	L	1	<del>                                     </del>	-tt	L
207	Ġ	<del> </del>	<del>  </del>	<del>                                     </del>	Ğ
201	<u> </u>				<u> </u>

104 / 129

Position		Diverse Amino Acid	Amino Acid Configuration to Inhibit Metastases
208	L		L
209	1		
210	- 1		
211	С		С
212	G		G
213	V		V
214	G		Ğ
215			
216	F		F
217	М		M
218	Н		Н
219	R		R
220	R		R
221	S		S
222	К		K
223	К		К
224	V		V
225	Q		Q
226	R		R
227	G		G
228	S		S
229	Α		A

105 / 129

Position		Di	verse Amino	Acid	Amino Acid Configuration to Inhibit Metastases
_32	M				M
_31	S				S
_30	W				W
29	K			+ +	K
	K				K
_28					0
_27	Α	S			
_26	L				<u>L</u>
_25	R				R
_24	1				<u> </u>
_23	Р				P
_22	G				G
_21	D	G			0
_20	L				Ĺ
_19	R				R
_18	A	V			0
_17	Ā			<del></del>	Ä
17	T		<del></del>		T T
_16			<del>                                     </del>	+	
_15	V		<u> </u>		V
_14	T				T
_13	L				<u>L</u>
_12	М				M
_11	L				L
_10	Α	S			0
_9	Ī	М			Ö
8	L				Ľ
8 7	S		<del> </del>		S
_6	S	T			0
-0		P			
_5	L		S		0
4 3	L	V			0
_3	Α				A
_2	E				E
_1	G				G
1	R				R
2	D				D
3	Р	S		1	0
4	Р				P
5	E				- E
6	D		<del>                                     </del>		D
7	F				F
<u>'</u>	V				V
8		-	<del>                                     </del>		
9	F	L	Y		0
10	Q		<b></b>		<u> </u>
11	F				F
12	K		<u> </u>		K
13	Α	G			0
14	L	М			LM
15	C	i	1		С
16	Ÿ				Y
17	F		<del>                                     </del>		F
		-	<del> </del>		T
18	T		<del>                                     </del>	<del></del>	1
19	N	ļ	<del> </del>		N O
20	G	<u> </u>			G
21	Т				T
22	E				E
23	L	R	1		()
24	V				V
25	R	<b> </b>	<del>  </del>	<del>                                     </del>	R
26	G	L	Y		0
27	V	<del></del>	<del> '- </del>	<del>                                     </del>	V
		L	II		V

106 / 129

Position		Di	verse A	mino Ac	id	Amino Acid Configuration to Inhibit Metastases
28	S	Т				()
29	R					Ř
30	H	S	Υ			()
31	i					ĭ
32	Ÿ					Y
33	N					N
34	R					R
35	Ē					E
36	E					E
37	D	<del></del> -	Y			0
		- <del>'</del> -	1			
38	A					() R
39	R					F
40	F					D
41	D					
42	S					S D
43	D					
44	V				<del>                                     </del>	V
45	E	G			ļ	0
46	E	V			ļ	0
47	F	Υ				0
48	R					R
49	Α					A
50	V					V
51	T					Т
52	Ĺ	Р				0
53	L	Q				()
54	G					G
55	L	Р	R			0
56	L	Р				0
57	Α	D	S	V		0
58	Α					Ā
59	E					E
60	Υ					Y
61	w					W
62	N					N
63	S					S
64	Q					Q
65	ĸ		<del> </del>			K
66	D	Е				()
67	1	V			<del></del>	Ů.
68	Ė		<del>                                     </del>			L
69	E			t		E
70	E	G	R			0
71	A	В	K	Т	<del>                                     </del>	V O
72	R	<del></del>	<del>  ^</del>	<del>  '</del>	<del> </del>	R
73	A	ļ		<del> </del>	<del>                                     </del>	A
74	<del>  ^</del>	E	S		<del>                                     </del>	0
74	Α		3	-	<del>                                     </del>	
75	<u> </u>	V	<del> </del>		<del>                                     </del>	() D
76	D	-	ļ		<del>  </del>	RT
77	R	Т	<u> </u>		-	
78	V		ļ	<b></b>	-	V
79	С		ļ <u>.</u>		<del>                                     </del>	C
80	R		<del> </del>	ļ		R
81	Н			ļ	L	Н
82	N		ļ	<u> </u>		N.
83	Υ		<u> </u>			Y
84	E	Q	<u> </u>		<u> </u>	0
85	L	V				()
86	Α	E	G			()
	•	-		•		

#### 107 / 129

Position		Die	vorsa A	mino Ac	id	Amino Acid Configuration to Inhibit Metastases
87	F	L	Y		1	LL
88	R					R R
	G	т :				0
89		T				
90						0
91	L					L
92	Q					Q
93	R					R
94	R					R
95	V					V
96	E					E
97	Р					P
98	T					T
99	V					V
100	Τ					T
101	1					
102	S					S
103	Р					P
104	S					S
105	R			ļl		R
106	Т					Ţ
107	E					E
108	Α					A
109	L					L
110	N					N
111	Н					Н
112	Н					Н
113	N					N
114	L					L
115	L					L
116		V				IV
117	С					С
118	S					S
119	V					V
120	Т					Т
121	D					D
122	F					F
123	Y					Y
124	Р			1		Р
125	Α	G	S			AA
126	Н	Q				0
127	ī		·			Ĭ
128	K		İ			K
129	V		<u> </u>			V
130	à	R				0
131	w					W
132	F				<del></del>	F
133	R					R
134	N		<b></b>			N N
135	D		ł			D
136	Q		<del> </del>	<del>                                     </del>		Q
137	E		<del>                                     </del>	<del>  </del>		- <del>- 3</del> F
138	E		<del> </del>	<del>                                     </del>	+	E E
139	T		<del>                                     </del>	<del>                                     </del>		T
140	A	Т		<del>                                     </del>		0
140	G	L <u>L</u>		-		G
141	V		<del> </del>	}		V
142					1	V
143	٧		-		<b></b>	V C
144	S					S
145	T		L	I		Т

#### 108 / 129

Position		Div	verse Amino Ad	cid	Amino Acid Configuration to Inhibit Metastases
146	P				P
147	L				L
148	ı				I
149	R				R
150	N				N N
151	G				G
151					D
152	D			<del> </del>	
153	W			· · · · · · · · · · · · · · · · · · ·	W
154	T				T
155	F				F
156	Q				Q
157					
158	L				L
159	V				V
160	М			<del> </del>	M
161					L
162	L			<del>  </del>	E
	E			<del>                                     </del>	
163	M			<b>_</b>	M
164	Т				<u>T</u>
165	Р				Р
166	Q				Q
167	Н	R			()
168	G				Ğ
169	D				D
170	V				V
171	Y				Y
					T
172	T		ļ	ļ <u> </u>	
173	С			<u> </u>	C
174	Н				Н
175	>				V
176	E				E
177	Н				Н
178	Р	-			P
179	S			<del>                                     </del>	S
180	L			<del>                                     </del>	L
181	Q			<del>   </del>	ā
101				<del>                                     </del>	
182	N	S			0
183	Р				P
184	<u> </u>				
185	I	Τ			()
186	V				V
187	E				E
188	w				W
189	R			1	R
190	A		<del>  </del>	<del>                                     </del>	A
				1	- â
191	Q		<del>                                     </del>	<del>  </del>	
192	S			<del> </del>	S
193	E				E
194	S				S
195	Α				A
196	Q				Q
197	N	S			()
198	K		<del>                                     </del>		K
199	M			+	M
200	L		<del>                                     </del>	<del>                                     </del>	L
200			<del>                                     </del>	<del>                                     </del>	S
201	S		<del></del>	<del>                                     </del>	>
202	G		<b></b>	<del>                                     </del>	G
203	!	V			II
204	G				G

109 / 129

Position		Di	verse Amino Acid	Amino Acid Configuration to Inhibit Metastases
205	G			G
206	F			F
207	V			V
208	L			L
209	G			G
210	L			L
211	ı			
212	F			F
213	L			L
214	G			G
215	L			L
216	G			G
217	L			L
218	T			I
219	ı			I
220	Н	R		0
221	Н	Q		0
222	R			R
223	S			S
224	Q	R		QR
225	K			К
226	G			G
227	Р			P
228	Q			Q
229	G			G
230	Р			P
231	Р			P
232	Р			Р
233	Α			A
234	G			G
235	L			L
236	L			L
237	Н			Н

110 / 129

Position		Di	verse A	mino A	cid		Amino Acid Configuration to Inhibit Metastases
_29	М						M
28	V						V
27	Ċ						С
26	L			<del></del>			Ľ
_20		R	<u> </u>				0
_25	K						
_24	F	L					LL
_23	Р						P
_22	G						O
_21	G						G
_20	S						S
_19	C						C
18	M						M
10		<del></del>					
_17	Α	T	ļ				0
_16	Α	V					()
_15	L						<b>L</b>
_14				İ			T
_13	V						V
12	T		i	1			T
	L		<del> </del>				<u>L</u>
_10	М		<del>                                     </del>	<b></b>	h		M
			<del> </del>	<b> </b>	-		
_9	V		<u> </u>	ļ			V
_8	L						L
8	S						S
_6	S						S
_5	Р						P
_4	L						L
_3	Ā						A
2							Ĺ
	L						
_1	Α	S					0
1	G						G
2	۵						D
3	Т						T
4	Q	R					()
5	Р						P
6	R		<del> </del>				R
7	F						F
				<del> </del>			
8	L						<u>L</u>
9	E	K	W				()
10	ш	Q	Υ				()
11	D	G	L	Р	S	٧	()
12	К	Т					Ŏ
13	F	G	Н	R	S	Y	0
14	Ē	K	<del>-                                    </del>	† · ` ` `	<del></del>	<u> </u>	0
15	C	<del>- '`</del>	<del> </del>	<del>                                     </del>	<b>-</b>		C
15	<u> </u>	_	\		ļ		
16	H	Q	Y	ļ	ļ		0
17	F						F
18	F						F
19	N						N
20	G						G
21	T	<b>†</b>	l		<del> </del>		T
22	E		<del> </del>	-	<del> </del>	<b> </b>	Ē
	<u> </u>	<del> </del>	-	-	<del> </del>		<u>L</u>
23	R		<del></del>	-			R
24	V				<u> </u>	ļ	V
25	Q	R	L				0
26	F	L	Y				0
27	L						Ľ
28	D	Е	Н	<b></b>	1		0
29	R	<del>-</del>	+		1		Ř
30	C		ы	<del>                                     </del>	R	Y	^
JU		G	Н	L	K	T	()

#### 111 / 129

Position		Div	verse Ar	mino Ac	id	Amino Acid Configuration to Inhibit Metastases
31	F	1	V			()
32	Н	Y				Ö
33	H	N				0
34	ä					Q
						E
35	E					
36	E					E.
37	F	L	N	S	Υ	0
38	Α	L	V			()
39	R					R
40	F	Υ				0
41	D					Ď
42	s					S
42						
43	D					
44	V					V
45	G					G
46	E					E
47	F	Υ				0
48	R					Ř
49	A					A
50	v					v
50						T
51	T				-	
52	E					<u>E</u>
53	L.					L
54	G					G
55	R					R
56	Р				· · · · · · ·	Р
57	Ā	D	S	V		0
58	A	E				O O
					<del></del>	E
59	E					
60	Н	S	Y		ļ	0
61	W					W
62	N					N
63	S					S
64	Q					Q
65	K					K
66	D					D
67	F	T	L		-	0
	l L		<del></del>		<del> </del>	Ľ
68			<u> </u>	<u> </u>	<b></b>	E
69	E			ļ		
70	D	Q	R			0
71	Α	E	K	R	L	0
72	R_					R
73	Α	G				0
74	Α	E	L	Q	R	()
75	V				<del>                                     </del>	V
76	Ď		<del>                                     </del>	<b>-</b>	1	D
77		Т	<del> </del>	<del>                                     </del>	<del> </del>	0
77	N		-		1	<u> </u>
78	V	Y				0 C
79	С					C
80	R					R
81	Н					Н
82	N				[	N N
83	Y	<b> </b>		<b> </b>		Y
0.4	G		<del> </del>	<del>                                     </del>	<del> </del>	G
84		1	<del></del>	-	<del> </del>	
85	Α	V	ļ		<b></b>	0
86	G	V			<u> </u>	0
87	E					E
	S		1			S
88	F	1				F

#### 112 / 129

Position		Di	verse Ar	nino Ac	oid	Amino Acid Configuration to Inhibit Metastases
90	T					T
91	V					V
92	Q					Q
93	R					R
94	R					R
95	V	-				V
96	E	Н	Q	Υ		
90			- Q			0
97	Р	1/				P
98	E	K				0
99	V					V
100	T					T
101	>					V
102	Υ					Y
103	Р					Р
104	Α	S				()
105	К					Κ
106	T					T
107	Q					Q
	P		<del>  </del>			P
108					<del>                                     </del>	
109	L		ļ			L
110	Q					Q
111	Н					Н
112	Н					Н
113	N					N
114	L					L
115	L					L
116	V					V
117	c					С
118	S		<del>                                     </del>			S
119	v		<del> </del>			V
120	N	S				0
120	F	3	<b></b>			F
121						
122	G		ļ			G
123	Y					Y
124	Р				ļ ļ	P
125	G					G
126	S				l	S
127	-					I
128	E					E
129	V					V
130	R					R
131	ŵ		<del> </del>			W
132	F	<del> </del>			<del> </del>	F
133	Ĺ	R			<del>                                     </del>	0
133		17	<del> </del>		<del>  </del>	
134	N		<b>  </b>			N
135	G		$\vdash$		<b>  </b>	G
136	Q				ļ	Q
137	E					É
138	E					E
139	K					K
140	Α	Т				0
141	G					Ğ
142	M	V	1		<del>                                     </del>	0
143	V		<del> </del>			V
144	S		<del>                                     </del>		<del>                                     </del>	S
			<del> </del>		<del>  </del>	)
145	T	ļ			<del> </del>	T
146	G				<del>  </del>	G
147	L		ļ		<b> </b>	L
148	<u> </u>	<u> </u>				l

#### 113 / 129

Position		Di	verse A	mino Acid	····	Amino Acid Configuration to Inhibit Metastases
149	Н	Q	. 5.5071	7,010		()
150	N					Ň
151	G					G
152	D					D
153	W					W
154	T					Т
155	F					F
156	Q					Q
157	Т					T
158	L					L
159	V					V
160	М					M
161	L					L
162	E					E
163	T					Т
164	F	٧				()
165	Р					P
166	Q	R				()
167	S					S
168	G					G
169	E					E
170	<b>V</b>					V
171	Υ					Υ
172	T					T
173	C					C
174	σ					Q
175	٧					V
176	E					E
177	Н					H
178	P					P
179	S					S
180	L	V				0
181	М	T			!	0
182	S					<u>\$</u>
183	Р					P
184	L					<u>L</u>
185	T					T
186	٧					V
187	E					E
188	W					W
189	R	S		-		0
190	A		<del> </del>	<b> </b>		A R
191	R		<b></b>	<del>  -</del>		S
192	S E			<del>  </del>		5 E
193	-					S
194	S			<del>                                     </del>		Ä
195	A	ļ	ļ	<del>                                     </del>		
196 197	Q S	<del> </del>	<del> </del>	$\vdash$		Q S
197	K	<del> </del>		<del>                                     </del>		K
198		ļ				M
	M			-		L
200	L			<del>                                     </del>		S
201	S G			1		G
202				-		V
203	V G	-	<b></b>	+		G G
204			<del> </del>	<del>  </del> -		G
205 206	G F	<del> </del>	<del>                                     </del>	<del>  </del>		F
	V	ļ	-	<del>  </del> -		V
207		I	<u> </u>			V

114 / 129

Position		Di	verse Amino Acid	Amino Acid Configuration to Inhibit Metastases
208	L			L
209	G			G
210	L			L
211	L			L
212	F			F
213	L			L
214	G			G
215	Α			Α
216	G			G
217	L			L.
218	F			F
219	T			
220	Υ			Y
221	F			F
222	R			R
223	N			N
224	Q			Q
225	K			K
226	G			G
227	Н			Н
228	S			S
229	G			G
230	L			L
231	Р	Q		()
232	Р			P
233	R	T		0
234	G			Ğ
235	F			F
236	L			L
237	S			S

115 / 129

Position		Di	verse A	mino Acid		Amino Acid Configuration With Less Tendency to Malignancy
_29	М		I			M
_28	M					M
27	V					V
	v L				+	
_26						L
_25	Q		ļ			Q
_24	V					V
_23	S					S
_22	Α					Α
_21	Α			ĺ		Α
_20	Р					Р
_19	R					R
_18	Т					ī
_17	·			-		v
_16	A		$\vdash$		+ + -	
						Α
_15	<u> </u>					<u>L</u>
_14	T					T
_13	Α		L			A
_12	L					L
_11	L					L
_10	М					M
_9	V					V
8	L					L
7	L					L
_6	T					T
_5	S					S
_4	v				+ + -	v
_3	V					V
_2	Q					Q
_1	G					G
1	R					R
2	Α					A
3	T					T
4	Р					P
5	Е					E
6	N					N
7	Υ					Y
8	L	V				LL
9	F	H	Y			0
10	Q	- 11	' '		<del></del>	Q
11	G	L	<del>                                     </del>			<u>LL</u>
12	R		ļ			R
13	Q					Q
14	E					E
15	С		L			С
16	Υ					Y
17	Α					
18	F					A F
19	N		<b> </b>			N
20	G				1 1	G
21	T		<del>                                     </del>	<del></del>		Ť
20	Q	ļ	-		+ +	Q
22	ע					
23	R F	ļ	$\vdash$			R
24						F
25	L	L	L			L
26	Ε					E
27	R					R
28	Υ					Υ
29	ı					
		t .				Y

#### 116 / 129

Fig.

Position   Diverse Amino Acid	<del>Diagra</del>	<del>gram</del> 116					
31	Position		Di	verse Ai	mino Acid	Amino Acid Configuration With Less Tendency to Malignancy	
32	31	N				N	
Section   Sect	32	R					
35	33						
36							
ST	35		L	Υ			
Section	36		V				
S	37	R				R	
A00	38						
A11	39	D					
42							
43	41						
### ### ### ### ### ### ### ### ### ##	42						
45						G	
## ## ## ## ## ## ## ## ## ## ## ## ##	44	E					
47							
48	46						
49				<u> </u>	<del></del>		
SO	40				<del>                                     </del>		
51         L           52         G           53         R           54         P           55         A           56         A           56         A           57         D           58         Y           59         W           60         N           61         S           62         Q           63         K           64         D           65         F           1         L           66         L           67         E           68         E           69         E           70         R           71         A           72         V           73         P           74         D           75         R           76         I           M         V           73         P           74         D           75         R           76         I           M         V           77         C							
S2	51						
S3	52						
S4	52	R			<del> </del>	R	
S5		P				P	
Section			D	F			
S7	56						
58         Y           59         W           60         N           61         S           62         Q           63         K           64         D           65         F           6         L           67         E           68         E           69         E           69         E           70         R           71         A           72         V           73         P           74         D           75         R           76         I           M         V           79         H           80         N           81         Y           82         E           83         L           84         D           G         G           GG         G           86         A           P         T           P         P           P         P           P         P           P         P           P	57						
S9	58						
60 N S S S S S S S S S S S S S S S S S S	59						
61         S           62         Q           63         K           64         D           65         F           66         L           67         E           68         E           69         E           69         E           69         E           70         R           71         A           72         V           73         P           74         D           75         R           76         I           M         V           77         C           78         R           79         H           80         N           81         Y           82         E           83         L           84         D           66         L           L         B           R         R           79         H           B         H           B         R           R         R           R         R	60						
63         K         D	61	S					
63 K	62	Q				Q	
65 F I L		K					
66         L         E         E         E         E         E         E         E         E         E         E         E         E         E         E         G         E         E         G         E         E         G         E         G         E         G         G         C         C         C         C         C         C         A         B         A         A         B         B		D					
67         E         E         E         E         E         G         E         E         G         G         E         G         M			!	L,			
68         E         K         ()           70         R         R         R           71         A         A         A           72         V         V         V           73         P         P         P           74         D         D         D           75         R         R         R           76         I         M         V         III           77         C         C         C           78         R         R         R           79         H         H         H           80         N         N         N           81         Y         Y         Y           82         E         E         E           83         L         L         GG           84         D         G         GG           85         E         G         GG           86         A         P         MM           87         M         V         MM           88         T         T         MM	66						
69         E         K         ()           70         R         R         R           71         A         A         A           72         V         V         V           73         P         P         P           74         D         D         D           75         R         R         R           76         I         M         V         III           77         C         C         C           78         R         R         R           79         H         H         H           80         N         N         N           81         Y         Y         Y           82         E         E         E           83         L         L         L           84         D         G         GG           85         E         G         GG           86         A         P         MM           87         M         V         MM           88         T         T         MM		E				E	
70         R         R         A         B         A         A         B         B         A		<u>E</u>					
71       A       A         72       V       V         73       P       P         74       D       D         75       R       R         76       I       M       V         11       II       II         77       C       C       C         78       R       R       R         79       H       H       H       H         80       N       N       N       N         81       Y       Y       Y       Y         82       E       E       E       E         83       L       L       L       L         84       D       G       GG       GG         85       E       G       GG       GG         86       A       P       MM       MM         87       M       V       W       MM       MM         88       T       T       T       T		E	K		ļ		
72         V         V           73         P         P           74         D         D           75         R         R           76         I         M         V           11         T         C           78         R         R         R           79         H         H         H           80         N         N         N           81         Y         Y         Y           82         E         E         E           83         L         L         L           84         D         G         GG           85         E         G         GG           86         A         P         MMM           87         M         V         MMM           88         T         T         T							
73         P         D         D         D         D         D         D         D         D         T         D	71	A A					
74         D         D           75         R         R           76         I         M         V           11         T         C           78         R         R           79         H         H         H           80         N         N         N           81         Y         Y         Y           82         E         E         E           83         L         L         L           84         D         G         GG           85         E         G         GG           86         A         P         MM           87         M         V         MM           88         T         T         T				-	<del>  </del>		
75         R         R         R         R         II	74						
76         I         M         V         II           77         C         C         C           78         R         R         R           79         H         H         H           80         N         N         N           81         Y         Y         Y           82         E         E         E           83         L         L         L           84         D         G         GG           85         E         G         GG           86         A         P         MM           87         M         V         MM           88         T         T         T	75						
77         C         C           78         R         R           79         H         H           80         N         N           81         Y         Y           82         E         E           83         L         L           84         D         G           85         E         G           86         A         P           87         M         V           88         T         T	76		NA.	1/	<del>                                     </del>	II II	
78       R         79       H         80       N         81       Y         82       E         83       L         84       D       G         85       E       G         86       A       P         87       M       V         88       T       T	77		141	<del></del>		<u>"</u>	
79       H       H         80       N       N         81       Y       Y         82       E       E         83       L       L         84       D       G         85       E       G         86       A       P         87       M       V         88       T       T	72	P		<del>                                     </del>	<del>                                     </del>		
80     N       81     Y       82     E       83     L       84     D       85     E       86     A       87     M       88     T    N  Y  GG  GG  GG  MM  MM  MM  MM  T	79	H	ļ	<del> </del>	-	Ĥ	
81       Y         82       E         83       L         84       D       G         85       E       G         86       A       P         87       M       V         88       T       T		N				N N	
82       E         83       L         84       D       G         85       E       G         86       A       P         87       M       V         88       T       T	81	Y	<del> </del>			Ÿ	
83         L         L           84         D         G           85         E         G           86         A         P           87         M         V           88         T         T	82	Ė		<b> </b>			
84         D         G           85         E         G           86         A         P           87         M         V           88         T         T	83	<u>-</u>		<u> </u>		L	
85         E         G           86         A         P         MM           87         M         V         MM           88         T         T         T	84	D	G			GG	
86         A         P         MM           87         M         V         MM           88         T         T         T	85	E	G			GG	
87 M V MM 88 T T	86	Α	Р			MM	
88 T T	87	М					
89 L L	88	T					
	89	L				L	

### 117 / 129

Position	<u> </u>	Di	verse Amino	Acid		Amino Acid Configuration With Less Tendency to Malignancy
90	Q					Q
91	R					R
92	R					R
93	V					V
94	à					Q
95	P					P
96	ĸ	R				0
97	Ÿ				1	V
98	N				· · · · · · · · · · · · · · · · · · ·	N
99	V			<del></del>	1	V
100	S				· · · · · · ·	S
101	P		-			P
102	S				<del> </del>	S
102					ļ	K
103	K	-		_		
104	K				ļ	K
105	G					G
106	P				ļ	P
107	L				ļ	L
108	Q					Q
109	Н					H
110	Н				ļ	H
111	N					N
112	L					L
113	L					L
114	V					V
115	С					С
116	Н					H
117	V				1	V
118	Т				1	T
119	D					D
120	F		<del>  </del>			F
121	Υ			- 1		Y
122	Р				1	P
123	G				†	G
124	s		<del></del>			S
125	Ĭ		<del>                                     </del>		<del>                                     </del>	I
126	Q				1	Q
127	v		<del></del>		<del> </del>	V
128	R				1	R
					-	W
129	W F	<del>                                     </del>	<del>                                     </del>	-	+	F
130			<del>                                     </del>		1	
131	L N	<u> </u>	<del>                                     </del>		+	N N
132		-	-		+	G
133	G	-	<del>  </del>	-	+	Q
134	Q	ļ	<del>                                     </del>		+	
135	E		<del> </del>		<del> </del>	E
136	E	ļ	ļ	$\rightarrow$	-	E
137	T		ļ			T
138	Α				<del>   </del>	<u>A</u>
139	G					G
140	V				1	V
141	V					V
142	S					S
143	Т					T
144	N					N
145	L					L
146	ī					
147	R		<del>                                     </del>		<b>†</b>	R
148	N		<del>                                     </del>		1	N
170	1 14	L	<del></del>			<u> </u>

#### 118 / 129

Position	Diverse Amino Acid					Amino Acid Configuration With Less Tendency to Malignancy
149	G					G
150	Ď					D
151	w					W
152	T					T
153	F					F
154	Q	-			-	Q
155	Ī					·
156	Ė					L
157	V					V
158	M				-	M
159	L		-	<del></del>	-	L
160	E					E
100						
161	M					
162	T					T
163	P					P
164	Q			<u> </u>		Q
165	Q					Q
166	G					G
167	D					D
168	>					V
169	Υ					Y
170		T				0
171	C					С
172	Q					Q
173	V					V
174	Ε					E
175	Н					H
176	T					T
177	S					S
178	L	М				0
179	D					Ď
180	S					S
181	Р					Р
182	V				1	V
183	T					Т
184	V					V
185	E		<del></del>			E
186	W		tt			W
187	K					K
188	A		1			A
189	Q					Q
190	S				_	Š
191	D	<del>                                     </del>	<del>  </del>			D
191	S	<b> </b>	<del>                                     </del>			S
		<b> </b>				A
193	A	<del> </del>	<del>  </del>		-	R R
194	R	-				<u> </u>
195	S	ļ	<del>  </del>	-		S
196	K	<b></b>	<b>  </b>			K T
197	T	-				· · · · · · · · · · · · · · · · · · ·
198	<u>L</u>		$\vdash$			L
199	T					Ţ
200	G					G
201	Α				_	A
202	G					G
203	G					G
204	F					F
205	V					V
206	L					L
	G					G

119 / 129

Position		Diverse Amino Acid	Amino Acid Configuration With Less Tendency to Malignancy
208	L		L
209	1		l l
210	1		1
211	С		C
212	G		G
213	V		V
214	G		G
215	1		l
216	F		F
217	M		M
218	Н		Н
219	R		R
220	R		R
221	S		S
222	K		K
223	K		K
224	V		V
225	Q		Q
226	R		R
227	G _		G
228	S		S
229	Α		A

#### 120 / 129

Position		Di	verse Ar	nino Aci	d	Amino Acid Configuration With Less Tendency to Malignancy
_32	М					M
_31	S					S
_30	W					W
_29	К					K
_28	K					K
_27	A	S				0
26	Ĺ					L
_25	R					R
24	1					
_23	P					P
22	Ġ					G
	D	G				0
	L		<del> </del>	<del></del>		<u>Y</u>
_19	R					R
_18	A	V			<del></del>	0
_17	A					A
16						<del>1</del>
16 15	T V				-	V
14	T				-	T
	L					L
_13			<b></b>		<del></del>	M
_12	M					L
_11	L					
_10	Α	S				0
_9		М				0
_8	L					L
7	S		<u> </u>			S
_6	S	T	<u>-</u> -			0
_5	<u>                                     </u>	P	S			0
_4	L	٧				0
_3	A		<b></b>			A
_2	E					Ë
_11	G					G
11	R		ļ			R
2	D		ļ			D
3	Р	S		l.		0
4	Р					P
5	E					E
6	D					D
7	F					F
8	V					V
9	F	L	Υ			0
10	Q					Q
11	F	ļ	ļ			F
12	K		ļ			K
13	Α	G				0
14	L	М				0
15	С			I		C
16	Υ					Υ
17	F					F
18	T					T
19	N					N
20	G					G
21	T					T
22	E					E
23	L	R				0
24	V	i				V
25	R	İ				R
26	G	L	Υ			0
27	V	=	1			V
	<u> </u>	1	L			

121 / 129

Position		Div	verse Ar	nino Ac	id	Amino Acid Configuration With Less Tendency to Malignancy
28	S	T				S or ()
29	R					R
30	Н	S	Y		<u> </u>	0
31	i					
32	Ÿ					Y
33	N					Ň
34	R			-		R
						E
35	ш					E
36	E		- <del></del>			
37	D		Y			0
38	Α	V				0
39	R					R
40	F			1		F
41	D					D
42	S					S
43	D					D
44	V					V
45	E	G				0
46	E	V				Ŏ
47	F	Y				Ŏ
48	R				-	Ř
49	A					A
50	v		-			V
	T					Ť
51						
52	L	P				0
53	L	Q				0
54	G					G
55	L	P	R			0
56	L	P				()
57	Α	D	S	V		()
58	Α					Α
59	E					E
60	Υ					Υ
61	W					W
62	N					N
63	S					S
64	Q					Q
65	K					K
66	D	E				0
67	ī	V			<del>  </del>	Ŏ
68	Ė	<u> </u>			<del>                                     </del>	L
69	È	<del></del>	<del>                                     </del>			E
	E	-	R	L	<del>                                     </del>	0
70		G		<del></del>		
71	A	D	K	T	<del>                                     </del>	0
72	R		ļ		ļ	R
73	Α					A
74	Α	E	S	L		0
75	L	V				()
76	D					D
77	R	Т				0
78	V					V
79	С					С
80	R					R
81	Н		<b>†</b>		<del>                                     </del>	Н
82	N	<del> </del>	1	<del>                                     </del>	<del></del>	N N
83	Y	<del>                                     </del>	<del> </del>	<b></b>	<del>  </del>	Y
84	E	Q	<del> </del>	<del> </del>	<del>                                     </del>	0
			<del> </del>	<b> </b>	<del>                                     </del>	
85	L	V	<del>  </del>	ļ	<del>                                     </del>	0
86	Α	E	G		Ll	EG

122 / 129

Position		Di	verse A	mino Aci	d	Amino Acid Configuration With Less Tendency to Malignancy
87	F	L	Υ			0
88	R					Ř
89	G	Т				0
90	Ť	Ť				Ó
91	Ė	'				Ľ
						Q
92	Q			-		R
93	R					
94	R					R
95	V					V
96	Е					E
97	Р					P
98	T					T
99	V					V
100	T					T
101	i			<del> </del>		i
			<b></b>	<del> </del>		S
102	S			<b> </b>		P P
103	Р		-			S
104	S			1		
105	R			<u> </u>		R
106	T			<u></u> i		T
107	Е					E
108	Α					A
109	L					L
110	N					N
	Н					H
111					<del></del>	
112	Н					H
113	N					N
114	L					L
115	L					L
116	[ ]	V				0
117	С				i	С
118	S					S
119	V			<u> </u>		V
120	T				****	Ť
121	Ď		<del>                                     </del>	-		D
				<del> </del>		F
122	F		ļ	<b>├</b>		
123	Y		<u> </u>	<b> </b>		Y
124	Р					P
125	Α	G	S	ļ		()
126	Н	Q				0
127	1					
128	K					K
129	V		T -	1		V
130	à	R	<b> </b>	†		0
	W	<del>- '`</del>	<del> </del>	1		W
131		<del>                                     </del>	<del> </del>	1	-+	F
132	F			<b>├</b>		
133	R		ļ	<b>↓</b>		R
134	N	L	1			N
135	D					D
136	Q		l			Q
137	Q E		1			E
138	E	<b></b>	<b></b>	† †		E
139	누	<del> </del>	<del>                                     </del>	1		T
140	<u> </u>	T	<del> </del>	<del>  </del>		1
140	A	<del>                                     </del>	<del> </del>	<b> </b>		() G
141	G	ļ	-			<u>G</u>
142	V		<u> </u>			V
143	V					V
144	S					S
145	T		1			Т
	<del></del>	1				

### 123 / 129

Position		Div	verse Amino A	cid	Amino Acid Configuration With Less Tendency to Malignancy
146	Р				Р
147	L				L
148	ī				l l
149	R				R
150	Ň			<del>                                     </del>	N
151	Ğ				Ğ
152	D			<del>                                     </del>	D
153	W			+	W
			<del></del>	+	T
154	T				F
155	F				
156	Q				Q
157	ŀ				l l
158	L			1	L L
159	V				V
160	М				M
161	L				L
162	E				E
163	М				M
164	T				Т
165	P	-		1 1	Р
166	Q			-	Q
167	H	R			Ō
168	G				Ğ
					D
169	Ω.				V
170	V				
171	Y				Y
172	T		ļ		Ţ
173	С			_	C
174	Н				Н
175	V				V
176	E				E
177	Н				Н
178	Р				Р
179	S				S
180	L				L
181	Q				Q
182	N	S			0
183	P			<u> </u>	P
184	<del>                                     </del>			1	
185	<del>                                     </del>	T			0
186	<del>  '\</del>	<del>- '-</del>	<del></del>		V
187	E			+	E
	- W	<del> </del>	<del>                                     </del>		W
188		<del>                                     </del>	<del>  </del>	<del></del>	
189	R	ļ	ļ		R
190	Α	<u> </u>	ļ		A
191	Q				Q
192	S				S
193	E				E
194	S	L			S
195	Α				A
196	Q				Q
197	N	S			0
198	K	<u> </u>			K
199	M			1	M
200	L		<del>                                     </del>	1 1	L
		<del> </del>	<del>                                     </del>		S
201	S	<del></del>		<del>  </del>	<u> </u>
202	G	<b> </b>	<del>  </del>	<del>                                     </del>	G
203	1		<del>                                     </del>		0
204	G	l			G

124 / 129

Position		Di	verse Amino Acid	Amino Acid Configuration With Less Tendency to Malignancy	
205	G			G	
206	F			F	
207				V	
208	١			L	
209	G			G	
210	L			L	
211	Ī				
212	F			F	
213	L			L	
214	G			G	
215	L			L	
216	Ğ			G	
217	L			L	
218	Ī			l	
219	1			I	
220	Н	R		()	
221	Н	Q		0	
222	R			Ř	
223	S			S	
224	Q	R		0	
225	K			K	
226	G			G	
227	Р			P	
228	Q			Q	
229	G			G	
230	Р			Р	
231	Р			P	
232	Р			P	
233	Α			A	
234	G			G	
235	L			L	
236	L	1		L	
237	Н			Н	

125 / 129

Position	Diverse Amino Acid						Amino Acid Configuration to Inhibit Metastases	Amino Acid Configuration to Inhibit Metastases	
_29	М					]	М	M	
_28	V				1		V	V	
_27	С						Ċ	С	
26	L						L	L	
_25	К	R					Q	0	
_24	F	L					Ö	Ŏ	
	P						P	P	
_22	G						G ·	G	
							G	G	
_21	G						<u> </u>	G	
_20	S						S	S	
_19	С						С	С	
_18	М						M	M	
_17	Α	Т					0	0	
_16	Α	>					0	0	
_15	L						Ľ	Ľ	
14	Ŧ						T	T	
_13	v						v	i v	
_13	T	-					Ť	T	
11		-					Ľ	i i	
	L							_	
_10	M						M	M	
_9	V						V	V	
8	L						L	<u>L</u>	
_7	S						S	S	
_6	S						S	S	
_5	Р						Р	P	
_4	L						L	L	
_3	Α						A	A	
_2	L						L	L L	
1	Ā	s					0	0	
1	G	<del>                                     </del>					Ğ	Ğ	
							D	D	
2	D	ļ							
3	T			ļ			T	T	
4	Q	R	ļ	<u> </u>			0	0	
5	Р						Р	Р	
6	R						R	R	
7	F	Ì			l		F	F	
8	L						L	L	
9	E	К	W				0	0	
10	E	Q	Y	-			Ö	0	
11	D	Ğ	l i	Р	S	V	Ö	Ŏ	
12	K	T	+-	<del></del>	<del>                                     </del>	_ <u> </u>	Ö	0	
13	F	Ġ	Н	R	s	Y	Ö	FF or GR	
	-		1-7	'\	<del>                                     </del>	· · · · ·			
14	E	K	<del> </del>	-	<b>_</b>		0	0	
15	С		<del>  ,,-</del>		<del> </del>	<u> </u>	C	C	
16	Н	Q	Υ	ļ		<del></del>	0	YY	
17	F		<u> </u>	ļ		ļ	F F	F	
18	F					<u> </u>	F	F	
19	N						N	N	
20	G			ľ			G	G	
21	T		<b>1</b>	ľ			T	T	
22	Ė	<b>—</b>	†		<b></b>	<u> </u>	Ē	E	
23	R	<del> </del>	+	<del> </del>	1	<del>                                     </del>	R	R	
	V	<del> </del>	<del> </del>	<del> </del>	1	<del>                                     </del>	V	V	
24		<del> </del>	ļ	<del> </del>	ļ	-			
25	Q	R	<b> </b>	<u> </u>	<u> </u>		0	0	
26	F	L	Υ	<b> </b>	<b></b>	<u> </u>	0	0	
27	L						L	L	
		E	Н	1	1		0	0	
28	D								
	R		<del>                                     </del>				Ř	Ř	

#### 126 / 129

Position	-	Div	erse A	mino A	cid	Amino Acid Configuration to Inhibit Metastases	Amino Acid Configuration to Inhibit Metastases
31	F	ļ.	V			0	0
32	Н	Y				0	0
33	Н	N				Ö	ŇN
34	Q					Q	Q
35	Ē					E	E
36	Ē					Ē	Ē
37	F	L	N	S	Y	0	0
38	Ä	Ē	v	Ŭ	•	0	V O
39	R		<u> </u>			Ř	Ř
40	F	Υ		-		0	0
		<u> </u>	-			D	<u>V</u>
41	D						S
42	S					S	
43	D					D	D
44	V					V	V
45	G					G	G
46	E					E	E
47	F	Υ				0	0
48	R					R	R
49	Α					A	Α
50	V			l		V	V
51	Ť		1			T	T
52	Ē		<u> </u>	1		Ē	Ė
53	ī			<del>                                     </del>		L L	Ī.
54	Ğ		-	<del>                                     </del>		G	Ğ
55				<del> </del>		R	R
	R			ļ		P	P
56	Р		_	·	-		
57	Α	D	S	V		Q	Q
58	<u>A</u>	E				<u>Q</u>	<u>Q</u>
59	E		L.,,	ļ		E	<u>E</u>
60	Н	S	Υ			Q	0
61	W					W	W
62	N			L		N	N
63	S					S	S
64	Q					Q	Q
65	K					K	K
66	D					D	D
67	F		L			0	0
68	L		<b></b>	†		Ľ	Ľ
69	Ē			1		E	E
70	D	Q	R			0	0
71	A	Ē	K	R		Ö	V O
72	R	<del>-</del>	<del>  ``</del>	<del>  ``</del>	<del>                                     </del>	Ř	Ř
73	A	G		<del>                                     </del>	<del> </del>	0	0
74	A	E	L	Q	R	<u> </u>	0
	V		╁┺	<del>  u</del>	<del>  '\</del>		V
75			<del>                                     </del>	<del> </del>		D	D
76	D	-	<u> </u>	ļ	-		
77	N	T	<u> </u>	<u> </u>	ļ	0	0
78	V	Υ	ļ	ļ		Q	0
79	С		<u> </u>	<u> </u>	<b> </b>	C	C
80	R		<u> </u>	<u> </u>	l	R	R
81	Н	L				Н	Н
82	N					N	N
83	Y		1			Y	Y
84	G			1		G	G
85	A	V	1	1		0	0
86	Ĝ	Ϊ́ν	1	<b> </b>	<b>†</b>	Ŏ	0
87	E	<del>-                                    </del>	<del> </del>	+	<del> </del>	E	V E
00	- E	<del> </del>	+	1-		S	S
88	S	<u> </u>	<del> </del>	+		5 F	5 F
89	LF	L	L	1	L	F	Г

127 / 129

Position						Amino Acid Configuration to Inhibit Metastases	Amino Acid Configuration to Inhibit Metastases
90	T					Т	T
91	<b>\</b>					V	V
92	α					Q	Q
93	R					R	R
94	R					R	R
95	V			Ī		V	V
96	E	Н	Q	Y		0	0
97	Р					P	P
98	E	K				()	0
99	V			1		Ŭ	V
100	Т			<b>†</b>		Т	T
101	V					V	V
102	Ÿ			1		Y	Y
103	P			<del>                                     </del>	<del> </del>	P	P
104	A	S		<del>                                     </del>	<del>                                     </del>	0	0
105	ĸ		<del></del>	<del> </del>		K	K
106	T		<del>                                     </del>	+	<del>                                     </del>	Ť	<u> </u>
107	à		$\vdash$	<del>                                     </del>	<del>  </del>	Q	i à
107	P			<del> </del>	<del> </del>	P	P
108			├─-	<del> </del>	<del>                                     </del>		<u> </u>
	<u> </u>			1	<del>  </del>		Q
110	Q			1	<del>  -</del>	Q H	H H
111	Н		<u> </u>		-		
112	H	ļ				H	Н
113	N			ļ	ļļ.	N	N .
114	L			1		L	L
115	L				<u> </u>	L	L
116	V				<u> </u>	V	V
117	С				ļ <u>i</u>	<u> </u>	C
118	S			ļ		Š	S
119	V			1		V	V
120	N	S	<u> </u>			0	0
121	F		ļ <u></u>		1	F	F
122	G					G	G
123	Υ					Y	Y
124	Р		<u> </u>			P	P
125	G					G	G
126	S					S	S
127	I					I .	I
128	E			1		Е	E
129	V					V	V
130	R					R	R
131	w			T		W	W
132	F		T	T		F	F
133	<u> </u>	R				0	0
134	N		T	1		Ň	Ň
135	G		t	1	+-+	G	G
136	Q	<b></b>	1	1	1	Q	Q
137	E	<del>                                     </del>	<b>—</b>	1		Ē	Ē
138	E	<del> </del>	$\vdash$	<del> </del>	+	E	Ē
139	K	<del>                                     </del>	1	+	+	K	ĸ
140	A	T	<del>                                     </del>	1	+	0	0
141	Ĝ	<del>- '</del>	<del>                                     </del>	1	<del>  </del>	G	Ğ
142	M	V	$\vdash$	+-	++	0	0
		<u>'</u> -	+	+	<del>  </del>	V	V
143	V			+	<del></del>	S	S
144	S	<b> </b>		-			- S
145	T		ļ	+	<del>  -</del>	T	
146	G	ļ	<u> </u>	1	<del>                                     </del>	G	G
147	L			1	<b></b>	L	L
148		1	1	1	1 1		

128 / 129

Position			rse A	mino ,	Acid	Amino Acid Configuration to Inhibit Metastases	Amino Acid Configuration to Inhibit Metastases
149	Н	Q				0	0
150	N					N .	N
151	G					G	G
152	D					D	D
153	W					W	W
154	_T_					T	Т
155	F					F	F
156	α				$\perp$	Q	Q
157	Т					T	T
158	L					L	<u>L</u>
159	V					V	V
160	М					M	M
161	L					L	<u> </u>
162	E		L			E	E
163	T					T	T
164	F	V				0	0
165	Р	L				P	Р
166	Q	R				0	0
167	S	L				S	S
168	G					G	G
169	E					E	E
170	٧					V	V
171	Υ					Υ	Y
172	T					T	Т
173	С					С	С
174	Q					Q	Q
175	V					V	V
176	E					E	E
177	Н					Н	Н
178	Р					Р	Р
179	S					S	S
180	L	V				0	0
181	М	T				0	0
182	S					S	S
183	Р					Р	Р
184	L					L	L
185	T					T	Т
186	V					V	V
187	E		l			E	E
188	W					W	W
189	R	S				0	0
190	Α					Α	Α
191	R					R	R
192	S	ľ				S	S
193	Е					E	E
194	S					S	S
195	Ā					A	Α
196	Q					Q	Q
197	S					S	S
198	K					K	K
199	M	†				M	M
200	L	t	i –			L	L
201	S	<b>—</b>				S	S
202	Ğ	<del>                                     </del>	<del> </del>		+	G	G
203	V	$\vdash$	t			V	V
204	Ğ	<del>                                     </del>	<b>†</b>	<del>                                     </del>	1	G	Ğ
205	G	<del>                                     </del>	_	$\vdash$		G	G
206	F	<b>†</b>				F	F
207	V	<del>                                     </del>	<del>                                     </del>			·	· V
		<u> </u>				<u> </u>	· · · · · · · · · · · · · · · · · · ·

129 / 129

Position		Di	verse Ami	no Acid	Amino Acid Configuration to Inhibit Metastases	Amino Acid Configuration to Inhibit Metastases
208	L				L	L
209	G				G	G
210	L				L	L
211	L				L	L
212	F				F	F
213	L				L	L
214	G				G	G
215	Α				A	Α
216	G				G	G
217	L				L	L
218	F				F	F
219						T
220	Y				Y	Y
221	F				F	F
222	R				R	R
223	N				N	N
224	Q				Q	Q
225	K				K	K
226	Ğ				G	G
227	Н				Н	Н
228	S				S	S
229	G				G	G
230	L				L	L
231	Р	Q			0	0
232	Р				P	P
233	R	Т			0	0
234	G				G	G
235	F				F	F
236	L				L	L
237	S		1		S	S